VENTURE CAPITAL IN UTTAR PRADESH: PROBLEMS AND PROSPECTS

ABSTRACT

OF THE

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Venture capital in Uttar Pradesh: Problems and Prospects

Venture capital is the provision of capital for business ventures. It supports entrepreneurial talent with funds and business skills to exploit market opportunities with an aim to obtain capital gains. Studies on venture capital have highlighted a number of issues in venture capital funding. In this study the problems and prospects of venture capital in the state of Uttar Pradesh are studied. The structure of this study has been depicted in figure 1.

Chapter 1 Venture capital concepts

1.1 Definition of venture capital.

Chris (1990) has defined Venture capital as the provision of risk bearing capital, usually in the form of a participation in equity, to companies with high growth potential. In addition, the venture capital company provides some value added services in the form of management advice and contribution to overall strategy. The relatively high risk of the venture capitalist is compensated by the possibility of high return, usually through substantial capital gains in the medium term.

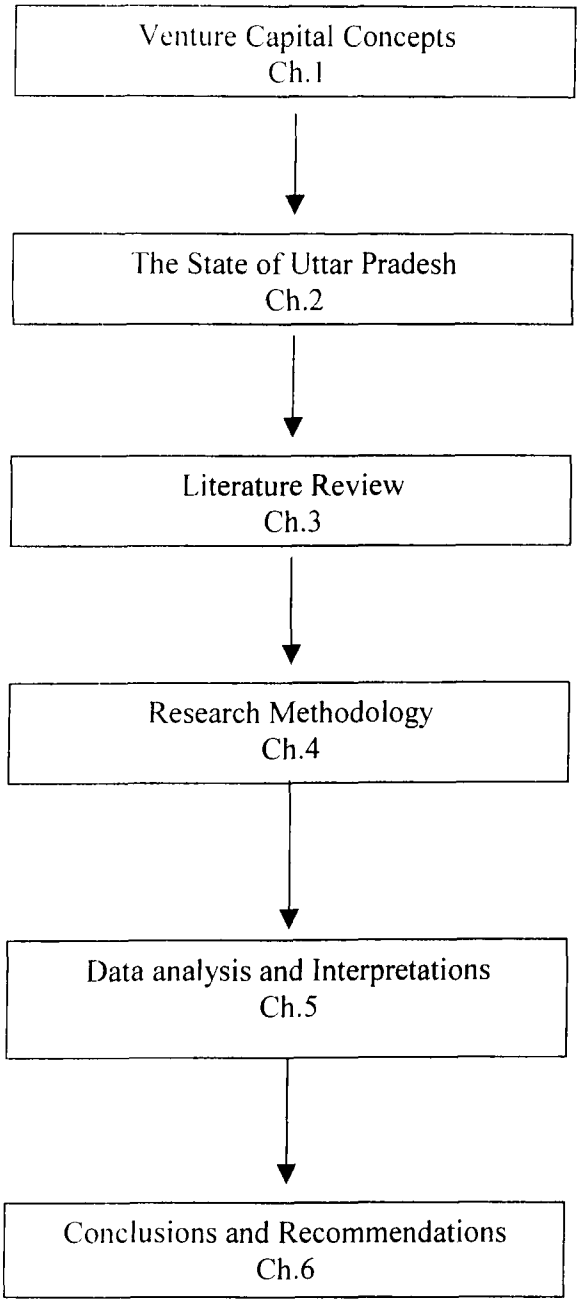
1.2 Distinguishing features of venture capital funding

Venture capital has some unique characteristics that separate them from traditional sources of funds. Their investments which are in startups firms have **firstly;** a higher level of uncertainty, **secondly**; they have substantial asymmetric information, and **thirdly**; they typically have higher intangible assets and growth prospects.

1.3 Process of venture capital consists of a number of steps that are undertaken by venture capitalist while investing in a company. They are as follows (Tyebjee & Bruno, 1986; Sagari & Guidotti 1991).

1. **Deal origination**-referral system is an important source of information for VC regarding the potential investors
2. **Screening-of proposals** regarding their size of investment, geographical location and stage of financing is done for those proposals which are of interest to the VC
3. **Evaluation and due diligence**- the risk and returns are estimated

Figure 1 Structure of Study



4. **Deal structuring**-terms of deals are decided. These include details such as the amount of funding, the share the company, the contracts. VC negotiate deals to ensure a returns

commensurate with the risk, control the organization, minimize taxes, assure liquidity, and the right to replace management in case of poor performance

5.Post investment activities and exit- VC involve themselves in major decisions and steer the company towards exit. Exit can be in four ways, initial public offer, acquisition by another company, and repurchase of the VC's share by the investee company, purchase of the VC share by third party.

As shown in table 1, venture capital investment can be of various types

Stage	Venture capital Type	Description status of project	Period	Risk
I	Seed	Supports an idea or concept or R&D	7-10	Extreme
II	Start up	Initiating Operations or developing prototypes	5-10	Very High
III	Expansion	Expansion in Production/marketing	3-7	Medium
IV	Mezzanine	Last stage before public issue	1-3	Low
V	Buy out	Acquisition of a product line business	1-3	Low
VI	Turnaround	Re-establishment of business, turning around a sick company.	3-5	Medium to high

1.4 Origin of venture capital -From its earliest beginnings on the East Coast of U.S. venture capital gradually expanded and became an increasingly specialized institution. During this period, the locus of the venture capital industry shifted from New York and Boston on the East Coast to Silicon Valley on the West Coast Florida (Richard & Martin Kenney, 1998). Development of venture capital in India can be understood in terms of the following phases, which are shown in table 2

Table 2

	Phase I	Phase II	Phase III	Phase IV
Time Period	Pre-1995	1995-97	1998-2001	2002 onwards
Key Features	Formation of TDICI	Entry of FVCI	Emergence of India centric VC Firms	US VCs increasing appetite to invest

				in India
Amount $ Mn	30	125	2847	5239
Number of Funds	8	20	50	75
Primary Stages	Seed, Early-stage and Development	Development	Early-stage and Development	Growth/Maturity
Primary Sources of Funds	World Bank, Government	Government	Overseas Institutional	Overseas Institutional
Seed/early-stage ($ m)	5	15	657	250
Number of Transactions	10	20	273	58
Development ($ m)	25	110	2168.1	3107
Number of Transactions	20	45	273	288
Growth/maturity ($ m)	-	-	21.9	1882
Number of Transactions	-	-	2	100
Total Number of Transactions	30	65	548	446
Average Investment ($ m)	1	2	5.20	11.75

Sources: TSJ Media and IVCA Publications (various years)

1.5 Present status of venture capital in India -According to Indian Venture Capital Association (IVCA), India was ranked as the third most active venture capital market in the Asia Pacific region (excluding Japan). Venture Capital firms invested US$543mn across 98 deals in India during 2007; the amount invested during 2007 was slightly higher compared to 2006, which had witnessed 94 deals totaling $500 million. (Venture Intelligence, 2007)

Table 3 Venture Capital, Analysis of Investments in 2002 and 2003

Deal Stage	No. Of Companies	Sum Invested	Average per deal
Startup/Seed	7	27.98	3.11
Early Stage	9	52.8	5.28
Expansion	44	345.82	7.36

Later Stage	2	4.56	2.28
Other/Unknown	15	159.05	10.6
Total 2002	77	**590.21**	**7.03**
Total 2003	**42**	**774.01**	**18.43**

Note: Amount in $ mn Source: IVCA, 2000

Chapter 2 - The state of Uttar Pradesh

2.1 **Introduction** - Located in the northern part of India. The capital of Uttar Pradesh is Lucknow. Uttar Pradesh is a large state; it is divided into 4 regions, having 17 circles and 70 districts.

2.2 **Economic condition of Uttar Pradesh** – The state lags behind other Indian states in-terms of economic parameters like per capita income, capita income, growth rate, gross capital formation and credit deposit ratio. A report on Uttar Pradesh by planning commission(2007), government of India shows that:

1. **Industrialization is decisive for growth-** it is observed that circles with higher shares in manufacturing output have larger per capita income.
2. **Investment climate needs to be enhanced** –in order to achieve a higher growth a large amount of investment has to come from private sources, which is an overwhelming task.
3. **Inadequate private sector response** annual survey of industries (ASI 1991-2002) data, shows a declining share of Uttar Pradesh as compared to other Indian states..

Chapter 3 Literature review

3.1 **Introduction**- This chapter focuses on the existing research related to the problems and prospects of venture capital. It starts by stating the role of venture capital in economic development and value creation. After which the issues in venture capital funding are discussed. Finally an overview of the investment criteria used by venture capitalist in previous studies is discussed and the limitations of venture capital funding are stated.

3.2 **Role of venture capital can in economic development**- previous studies have shown that venture capital can help in numerous ways;

1. Small businesses play a crucial role in creating jobs and spurring innovation because of which importance given to the financing of small growth companies which impacts the state and regional economic growth and development (Barkley & Markley, 2001)
2. Science literature and the business school literature both indicate the role of venture capital in facilitating innovation and technological progress (Allen & Hayward, 1990).
3. Venture capital investments show a significant and positive role in innovation, new business formation and economic growth (Husasin & Wang, 2000).
4. Venture capitalists act as catalyst for technological progress, thereby enhancing productivity and generating wealth for the entire economy (Koh & Koh, 2002).
5. Entrepreneurship and new firm formation is important for economic growth Feldman (2001). Venture capital can channel capital to new and innovative firms thus allowing entrepreneurs to pursue their goals. As shown by (Birch 1979; Kirchoff, 1994), among newly created firms, highly innovative firms create a disproportionately greater share of net new jobs than those new firms with less innovation intensity. This can promote regional economic development (Belke, Fehn & Foster, 2003).
6. Venture capital is a form of intermediation particularly well suited to support the creation and growth of innovative, entrepreneurial companies (Hellmann & Puri 2000, 2002; Kortum & Lerner 2000). Venture capital plays an important role in supporting entrepreneurial development and small business growth. (Sagari & Guidotti, 1991)

3.3 Problems faced by entrepreneurs in raising Venture Capital

Numerous studies have identified control issues and inexperienced management as problems faced by entrepreneurs in raising capital. Given below some obstacles faced by entrepreneurs'

1. Transaction costs – the costs to an investor of appraising the risks and returns from an investment tend to be fixed and high relative to the size of the investment.
2. Transaction size – venture capital investors typically require a minimum transaction size, which is often higher than the average funding requirement.
3. Higher risk - for early stage (and particularly pre-revenue) companies – because the management team or the product and market may be unproven.
4. Lack of exit options – there is no secondary market for trading in smaller firms' shares.

3.4 Assistance provided by venture capitalist

In a study of BVCA & Bannock Consulting (2006), nearly 80% of the companies felt that their VCT managers had made a major contribution other than the provision of finance. When there is a gap in the management team, VC increases its involvement in the affairs of the investee company (Lerner, 1995). Acting through the board of directors, VCs also have the power to hire and fire the senior management of their portfolio companies

Chapter 4 Research Methodology

This chapter starts with the identification of the problem, the research gap and the scope of the study and then puts forth the various steps through which this study has been carried out.

4.1 Identification of the problem

Firstly, as shown in previous chapters, Uttar Pradesh is an economically backward state. Promoting industrialization has been identified as a means to increase the prosperity of the state (Uttar Pradesh Development Report, 2007). **Secondly**, venture capital through funding and providing value added services could help in economic development of a region. **Thirdly**, as discussed earlier entrepreneurs while raising venture capital face problems.

4.2 Research Gap

Black & Gilson (1998) illustrated how differences in capital market organization and regulation affects the development and behavior of the venture capital industry. Thus studying a nascent venture capital market such as Uttar Pradesh might also give more general knowledge about how venture capital markets are created and in doing so what are the difficulties and opportunities. As most of the researches on venture capital have been carried out abroad, consequently for India in general and Uttar Pradesh in particular there is a lack of earlier researches.

4.3 Scope of the study

The following aspects related to the problems and prospects of Venture Capital in Uttar Pradesh are covered:

1. Venture capitalists have certain evaluation criteria, which they use while judging the suitability of an investment proposal. This study tries to find how far investment proposals from Uttar Pradesh fulfill the investment criteria laid down by a venture capitalist.
2. This study also tries to find out how venture capital can help in making Uttar Pradesh a more economically developed state
3. In view of its developmental role, governments in many countries have played a direct and indirect role in promoting venture capital. This research studies the role, which the government of Uttar Pradesh can play in promoting venture capital.
4. The effect of syndication in Uttar Pradesh is studied.
5. Entrepreneurs face problems in raising capital (a funding gap exist for new and small entrepreneurs, as discussed in literature review). The problems faced by entrepreneurs in raising capital in Uttar Pradesh are studied.
6. The scope of study covers the problems faced by entrepreneurs in raising venture capital.
7. Expectations of entrepreneurs in Uttar Pradesh from venture capital are also studied.
8. The sector-wise and stage-wise interest of venture capitalist is also studied

4.4 Objectives of the study

The perspective of venture capitalist are studied with regards to the following problems and prospects of Venture Capital in Uttar Pradesh:

1. To study the importance of the various investment criteria used in evaluation of proposals and to ascertain how far the proposals in Uttar Pradesh meets these criteria.
2. To decipher the role which ventures capital, can play in make Uttar Pradesh
3. To probe the role which government of Uttar Pradesh in promoting venture capital
4. To find out the sector-wise and stage-wise areas of interest in Uttar Pradesh.

The perspective of entrepreneurs of Uttar Pradesh is studied with regards to the following problems and prospects of Venture Capital in Uttar Pradesh:

1. To study the problems faced in raising Equity, Debt and Venture Capital.
2. To study the importance of the various types of help sought from a venture capitalist.

4.5 Hypotheses development

Hypothesis 1(Evaluation criteria)

Characteristics of entrepreneurs, Overall Significance test

$H1_{a0}$: **There is no difference between the characteristics of entrepreneurs in Uttar Pradesh and the characteristics of entrepreneurs required by a venture capitalist.**

Significance test for differences in individual variables

$H1_{a1o}$: There is no difference in the leadership qualities of entrepreneurs in Uttar Pradesh and the leadership qualities required by a venture capitalist.

$H1_{a2o}$: There is no difference in the integrity and commitment of entrepreneurs in Uttar Pradesh and the integrity and commitment as required by a venture capitalist.

$H1_{a3o}$: There is no difference in the long-term vision of entrepreneurs in Uttar Pradesh and the long-term vision as required by a venture capitalist.

$H1_{a4o}$: There is no difference in the commercial orientation of entrepreneurs in Uttar Pradesh and the commercial orientation as required by a venture capitalist.

$H1_{a5o}$: There is no difference in the technical expertise of entrepreneurs in Uttar Pradesh and the technical expertise as required by a venture capitalist.

$H1_{a6o}$: There is no difference in the financial expertise of entrepreneurs in Uttar Pradesh and the financial expertise required by a venture capitalist.

$H1_{a7o}$: There is no difference in the market knowledge of entrepreneurs in Uttar Pradesh and the market knowledge as required by a venture capitalist.

$H1_{a8o}$: There is no difference in the team handling ability of entrepreneurs in Uttar Pradesh and the team handling ability required by a venture capitalist.

Characteristics of products

Overall Significance test

$H1_{bo}$: **There is no difference between the characteristics of products and services in proposal from Uttar Pradesh and the characteristics of products and services required by a venture capitalist.**

Significance test for differences in individual variables

$H1_{b1o}$: The presence of uniqueness in product and services in investment proposals from Uttar Pradesh is as per the requirement of Venture Capitalist.

$H1_{b2o}$: The presence of product prototype in investment proposals from Uttar Pradesh is as per the requirement of Venture Capitalist.

$H1_{b3o}$: The presence of patent in investment proposals from Uttar Pradesh is as per the requirement of Venture Capitalist.

$H1_{b4o}$: The presence of superiority in products and services in investment proposals from Uttar Pradesh is as per the requirement of Venture Capitalist.

Characteristics of target market

Overall Significance test

$H1_{co}$: **There is no difference between the characteristics of target market in proposal from Uttar Pradesh and the target market characteristics required by a venture capitalist.**

Significance test for differences in individual variables

$H1_{c1o}$: There is no difference in the market size in proposal from Uttar Pradesh and the market size as required by a venture capitalist.

$H1_{c2o}$: There is no difference in the market growth rate in proposal from Uttar Pradesh and the market growth rate as required by a venture capitalist.

$H1_{c3o}$: There is no difference in the market competition in proposal from Uttar Pradesh and the market competition as required by a venture capitalist.

Features of deal

Overall Significance test

$H1_{do}$: **There is no difference between the features of deal in proposals from Uttar Pradesh and the features of deal required by a venture capitalist.**

Significance test for differences in individual variables

$H1_{d1o}$: The percentage share of equity (ownership) offered to venture capitalist in proposals from Uttar Pradesh is as per the requirement of venture capitalist.

$H1_{d2o}$: The price of equity being offered to venture capitalist in proposals from Uttar Pradesh is as per the requirement of venture capitalist.

$H1_{d3o}$: The level of risk in proposals from Uttar Pradesh is as per the acceptance level of venture capitalist.

$H1_{d4o}$: The returns in proposals from Uttar Pradesh are as per the requirement of venture capitalist.

$H1_{d5o}$: The willingness of other venture capitalist to participate in proposals from Uttar Pradesh is as per the requirement of venture capitalist.

$H1_{d6o}$: The provisions in contracts in proposals from Uttar Pradesh are as per the requirement of venture capitalist.

$H1_{d7o}$: The ease of exit in proposals from Uttar Pradesh is as per the requirement of venture capitalist.

Features of region

Overall Significance test

$H1_{eo}$: **There is no difference between the regional features of Uttar Pradesh and the regional features required by a venture capitalist.**

Significance test for differences in individual attributes

$H1_{e1o}$: There is no difference in the distance from office of venture capitalist in Uttar Pradesh and the distance from office as required by a venture capitalist.

$H1_{e2o}$: The clarity of rules and regulations in Uttar Pradesh is as per the requirement of venture capitalists.

$H1_{e3o}$: The stability of policies in Uttar Pradesh is as per the requirement of venture capitalists.

$H1_{e4o}$: The infrastructure facilities in Uttar Pradesh are as per the requirement of venture capitalists.

$H1_{e5o}$: The availability of trained manpower in Uttar Pradesh is as per the requirement of venture capitalists.

$H1_{e6o}$: The law and order in Uttar Pradesh is as per the requirement of venture capitalists.

Data for testing of the above Hypotheses was obtained from questions no. 1 and 2 of the questionnaire for Venture Capitalist.

Null Hypotheses 2 and 3 (Role of venture capital and government)

$H2_{ao}$: Venture capital funding will make no difference in promoting economic development in Uttar Pradesh.

$H2_{bo}$: Venture capital funding will make no difference in making industrial unit in Uttar Pradesh more competitive.

$H3_{o}$: Government cannot promote venture capital funding in Uttar Pradesh.

Data for testing of the above Hypotheses was obtained from questions 4, 5 and 6 of the questionnaire for Venture Capitalist

Null Hypothesis 4 (Syndication)

$H4_o$: Syndication cannot promote venture capital funding in Uttar Pradesh.

Data for testing of the above Hypothesis was obtained from question no.7 of the questionnaire for Venture Capitalist.

Hypothesis 5 (Problems in equity and debt capital)

Null hypotheses:

$H5_{ao}$: Entrepreneurs in Uttar Pradesh do not face problems in raising equity capital.

$H5_{bo}$: Entrepreneurs in Uttar Pradesh do not face problems in raising debt capital.

$H5_{co}$: Entrepreneurs in Uttar Pradesh face no significant difference between problems in raising equity capital and problems in raising debt capital.

$H5_{d1o}$: The problems faced in raising equity capital does not differ age- wise.

$H5_{d2o}$: The problems faced in raising debt capital does not differ age- wise.

$H5_{e1o}$: The problems faced in raising equity capital does not differ location wise.

$H5_{e2o}$: The problems faced in raising debt capital does not differ location wise.

$H5_{f1o}$: Problems faced in raising equity capital does not differ gender wise.

$H5_{f2o}$: Problems faced in raising debt capital does not differ gender wise.

Data for testing of the above Hypotheses was obtained from question 2 (part a and b) of the questionnaire for Entrepreneurs of Uttar Pradesh.

Null Hypotheses 6 (Problems in venture capital)

$H6_{ao}$: Entrepreneurs in Uttar Pradesh do not face problems in raising venture capital.

$H6_{bo}$: For the entrepreneurs of Uttar Pradesh the problems faced in raising venture capital does not differ age-wise.

$H6_{co}$: For the entrepreneurs of Uttar Pradesh the problems faced in raising venture capital does not differ location-wise.

$H6_{do}$: For the entrepreneurs of Uttar Pradesh the problems faced in raising venture capital does not differ gender-wise.

Data for testing of the above Hypotheses was obtained from question 4 of the questionnaire for entrepreneurs of Uttar Pradesh.

Null hypotheses 7 (Assistance of venture capitalist)

$H7_{ao}$: Entrepreneurs in Uttar Pradesh do not expect non-financial assistance from venture capitalist.

$H7_{bo}$: For the entrepreneurs of Uttar Pradesh the assistance expected from venture capitalist does not differ age-wise.

$H7_{co}$: For the entrepreneurs of Uttar Pradesh the assistance expected from venture capitalist does not differ location-wise.

$H7_{do}$: For the entrepreneurs of Uttar Pradesh the assistance expected from venture capitalist does not differ gender-wise

Data for testing of the above Hypotheses was obtained from question 5 of the questionnaire for Entrepreneurs of Uttar Pradesh. In all 54 hypotheses were tested, 37 from the questionnaire of venture capitalist and 17 from the questionnaire of entrepreneurs of Uttar Pradesh.

4.6. Sampling method and sample size

The list of entrepreneur in Uttar Pradesh came from the entrepreneurs registered with Indian industry association (IIA). IIA is primarily composed of members from the state of Uttar Pradesh. Past researches have also used such sate specific industrial association to collected data on entrepreneurs (Barriera, 2004). For interval scaled variables the following formula given by Nargundkar (2008) is used to determine the sample size, $\mathbf{N=(ZS/E)^2}$

Where, N= Sample Size

Z= Confidence Level

S= Population standard deviation for the variable which we are trying to study.

E= Tolerable error, expressed in the same units as the variables being measured.

While the list of venture capitalist came from the Indian Venture Capital and Private Equity association (IVCA), New Delhi. In view of the limited number of venture capitalist in India, all the venture capitalists that are members (IVCA) were selected.

Chapter 5 Data analysis and interpretation

5.1 Introduction - For the venture capitalist an overview of the areas of interest for venture capitalist in Uttar Pradesh, stages of venture capital funding, criteria used by venture capitalist in evaluating an investment proposal, role of venture capital in economic development, role of venture capital in industrial development, role of government in promoting venture capital and role of syndication in promoting venture capital is presented. While for the entrepreneurs data

related to entrepreneur's scale of business, funds requirement, problems in raising equity, problems in raising debt, problems in raising venture capital and assistance from venture capital funds has been presented.

5.2 Findings of study

	Entrepreneurship Characteristics	Average Rating Required	Average Rating in Uttar Pradesh
1	Leadership Qualities	3.94	3.79
2	Integrity and Commitment	3.81	3.62
3	Long Term Vision	3.44	2.81
4	Commercial Orientation	3.13	3.06
5	Technical Expertise	3.93	4.37
6	Financial Expertise	3.93	3.81
7	Knowledge of Market	4.38	4.13
8	Ability to handle a Team	3.62	3.43

	Product Characteristics	Average Rating Required	Average Rating in Uttar Pradesh
1	Uniqueness	4.75	3.44
2	Prototype Exist	3.18	3.37
3	Patent Exist	2.93	3.25
4	Superior Product	2.75	3.31

	Market Characteristics	Average Rating Required	Average Rating in Uttar Pradesh
1	Large Size	3.50	3.44
2	High Growth Rate	3.44	3.06
3	Low Competition	3.43	3.19

	Deal Characteristics	Average Rating Required	Average Rating in Uttar Pradesh
1	Percentage share of equity (ownership)	3.43	3.18
2	Price of equity being offered	2.75	3.31
3	Low risk	4.68	3.25
4	High returns	3.38	3.25
5	Participation of other venture capitalist	3.25	3.81
6	Provision in Contracts	3.38	3.62
7	Option of exit (ease of exit)	3.50	2.87

	Features of Region	Average Rating Required	Average Rating in Uttar Pradesh
1	Distance office of venture capitalist	4.25	2.50
2	Clarity in the rules and regulations	3.31	2.62
3	Stability in policies	3.25	2.56
4	Infrastructure facilities project	3.44	2.40
5	Availability of trained manpower	3.50	2.68
6	Conducive law and order	3.81	2.81

	Role of Venture Capital in Economic Development	Average Rating
1	Spur Innovation	4.18
2	Boost Entrepreneurship	3.31
3	Identifying areas where Uttar Pradesh has a competitive advantage	3.37
4	Generate employment	4.56
5	Help in attracting investments from other sources	3.25
6	Improve brand image of Uttar Pradesh	3.31
7	Help government to formulate policies to promote industrialization	3.19

	Role of Venture Capital in Industrial Development	Average Rating
1	Better evaluation of projects	3.56
2	Providing Strategic advice	4.06
3	Providing managerial advice	3.25
4	Expanding marketing networks	3.56
5	Better management of financial resources	3.43
6	Instill better governance	3.69
7	Assisting in Manpower recruitment	3.44

	Role of Government	Average Rating
1	By providing better infrastructure	3.56
2	Establishing incubation organizations	3.43
3	Improving manpower issues	3.31
4	Faster clearance of investment proposals	3.62
5	Simplifying regulatory and legal issues	3.18
6	Providing tax concessions	4.06
7	Establishing State dedicated Venture Capital Fund	3.19
8	Establishing special cell to oversee venture capital investments	3.06
9	Clarifying the policies and procedures	3.08
10	Ensuring stability in policies and procedures	3.75

	Features of Syndication	Average Rating
1	Better evaluation of investment proposal	3.37
2	Sharing of risk	3.75
3	Sharing of profit/loss	2.93
4	Better management of venture	3.62
5	Provides signals that the venture is good	3.50

	Problems in equity capital	Average Rating
1	Funds are insufficient	3.48
2	Difficult to convince others as there is a lack of trust	4.29
3	Cost of fund is high	3.46
4	Process is time consuming	3.20
5	Collateral/Guarantee is required	1.70
6	Excessive paper work	3.41
7	Assurances are required	3.59
8	Chances of obtaining finance are low	3.42

	Problems in Debt Capital	Average Rating
1	Insufficient Funds	1.66
2	Difficult to convince as there is a lack of trust	3.18
3	Cost of fund is high	3.38
4	Process is time consuming	3.18
5	Collateral/Guarantee is required	4.49
6	Excessive paper work	3.41
7	References/Assurances are required	3.51
8	Chances of obtaining finance are low	4.35

	Problems faced in venture capital	Average Rating
1	Venture capitalist are unapproachable	3.38
2	Venture capital is a costly source of raising capital	3.59
3	Venture Capitalist interfere in business decisions	3.41
4	Venture capital finances only high technology firms	3.48
5	Confidentiality is lost	3.86
6	Funds requirement are too small for Venture Capital funding	3.12
7	Negotiations with venture capitalist are time consuming	3.76
8	Chances of obtaining finance from are low	3.52

	Assistance provided by venture capitalist	Average Rating
1	Venture capital can provide funds for business	4.29
2	Venture capital can improve the brand image of your company	3.70
3	Venture capital provides help in strategic planning	3.08
4	Venture capital can provide help in marketing	3.99
5	Venture capital fund can provide technical assistance	2.52
6	Venture capital fund can help in raising finance from other sources	4.35
7	Venture capital fund can provide operational help	2.49
8	Venture capital fund can recruit and train manpower	3.06
9	Venture capital provides can improve corporate governance	2.74

5.3 Summary of results

	No.	Hypothesis	Test Value	Result
1	$H1_{ao}$	There is no difference between the characteristics of entrepreneurs in Uttar Pradesh and the characteristics of entrepreneurs required by a venture capitalist.	T=-1.67 P=0.116	Accepted
2	$H1_{a1o}$	There is no difference in the leadership qualities of entrepreneurs in Uttar Pradesh and the leadership qualities required by a venture capitalist.	T=-0.549 P=0.591	Accepted
3	$H1_{a2o}$	There is no difference in the integrity and commitment of entrepreneurs in Uttar Pradesh and the integrity and commitment as required by a venture capitalist.	T= -1.211 P=0.224	Accepted
4	$H1_{a3o}$	There is no difference in the long-term vision of entrepreneurs in Uttar Pradesh and the long-term vision as required by a venture capitalist.	T=-2.702 P=0.016	Rejected
5	$H1_{a4o}$	There is no difference in the commercial orientation of entrepreneurs in Uttar Pradesh and the commercial orientation as required by a venture capitalist.	T=-0.436 P=0.66	Accepted

6	$H1_{a5o}$	There is no difference in the technical expertise of entrepreneurs in Uttar Pradesh and the technical expertise as required by a venture capitalist.	T=2.87 P=0.012	Rejected
7	$H1_{a6o}$	There is no difference in the financial expertise of entrepreneurs in Uttar Pradesh and the financial expertise required by a venture capitalist.	T=-0.76 P=0.457	Accepted
8	$H1_{a7o}$	There is no difference in the market knowledge of entrepreneurs in Uttar Pradesh and the market knowledge as required by a venture capitalist.	T=-1.23 P=0.234	Accepted
9	$H1_{a8o}$	There is no difference in the team handling ability of entrepreneurs in Uttar Pradesh and the team handling ability required by a venture capitalist.	T=-1.24 P=0.233	Accepted
10	$H1_{bo}$	There is no difference between the characteristics of products and services in proposal from Uttar Pradesh and the characteristics of products and services required by a venture capitalist.	T= -1.12 P=0.28	Accepted
11	$H1_{b1o}$	The presence of uniqueness in product and services in investment proposals from Uttar Pradesh is as per the requirement of Venture Capitalist.	T=-5.88 P=0.000	Rejected
12	$H1_{b2o}$	The presence of product prototype in investment proposals from Uttar Pradesh is as per the requirement of Venture Capitalist.	T=0.783 P=0.446	Accepted
13	$H1_{b3o}$	The presence of patent in investment proposals from Uttar Pradesh is as per the requirement of Venture Capitalist.	T=0.306 P=0.764	Accepted
14	$H1_{b4o}$	The presence of superiority in products and services in investment proposals from Uttar Pradesh is as per the requirement of Venture Capitalist.	T=2.218 P=0.042	Rejected
15	$H1_{co}$	There is no difference between the characteristics of target market in proposal from Uttar Pradesh and the target market qualities required by a venture capitalist.	T= -1.789 P=0.94	Accepted
16	$H1_{c1o}$	There is no difference in the market size in proposal from	T= -0.34	Accepted

		Uttar Pradesh and the market size as required by a venture capitalist.	P=0.736	
17	$H1_{c2o}$	There is no difference in the market growth rate in proposal from Uttar Pradesh and the market growth rate as required by a venture capitalist.	T= -1.934 P=0.071	Accepted
18	$H1_{c3o}$	There is no difference in the market competition in proposal from Uttar Pradesh and the market competition as required by a venture capitalist.	T=-0.902 P=0.381	Accepted
19	$H1_{do}$	There is no difference between the features of deal in proposals from Uttar Pradesh and the features of deal required by a venture capitalist.	T= -1.19 P=0.091	Accepted
20	$H1_{d1o}$	The percentage share of equity (ownership) offered to venture capitalist in proposals from Uttar Pradesh is as per the requirement of venture capitalist.	T= -1.52 P=0.148	Accepted
21	$H1_{d2o}$	The price of equity being offered to venture capitalist in proposals from Uttar Pradesh is as per the requirement of venture capitalist.	T= 2.57 P=0.021	Rejected
22	$H1_{d3o}$	The level of risk in proposals from Uttar Pradesh is as per the acceptance level of venture capitalist.	T= -8.41 P=0.000	Rejected
23	$H1_{d4o}$	The returns in proposals from Uttar Pradesh are as per the requirement of venture capitalist.	T=-0.86 P=0.40	Accepted
24	$H1_{d5o}$	The willingness of other venture capitalist to participate in proposals from Uttar Pradesh is as per the requirement of venture capitalist.	T= 3.00 P=0.009	Rejected
25	$H1_{d6o}$	The provisions in contracts in proposals from Uttar Pradesh are as per the requirement of venture capitalist.	T= 1.13 P=0.27	Accepted
26	$H1_{d7o}$	The ease of exit in proposals from Uttar Pradesh is as per the requirement of venture capitalist.	T= -2.611 P=0.02	Rejected
27	$H1_{eo}$	There is no difference between the regional features of Uttar Pradesh and the regional features required by a	T=-12.10 P=0.000	Rejected

		venture capitalist.		
28	$H1_{e1o}$	There is no difference in the distance from office of venture capitalist in Uttar Pradesh and the distance from office as required by a venture capitalist.	T=-12.00 P=0.000	Rejected
29	$H1_{e2o}$	The clarity of rules and regulations in Uttar Pradesh is as per the requirement of venture capitalists.	T=-8.57 P=0.000	Rejected
30	$H1_{e3o}$	The stability of policies in Uttar Pradesh is as per the requirement of venture capitalists.	T=-4.44 P=0.001	Rejected
31	$H1_{e4o}$	The infrastructure facilities in Uttar Pradesh are as per the requirement of venture capitalists.	T=-4.37 P=0.001	Rejected
32	$H1_{e5o}$	The availability of trained manpower in Uttar Pradesh is as per the requirement of venture capitalists.	T=-6.35 P=0.001	Rejected
33	$H1_{e6o}$	The law and order in Uttar Pradesh is as per the requirement of venture capitalists.	T=-4.615 P=0.000	Rejected
34	$H2_{ao}$	Venture capital funding will make no difference in promoting economic development in Uttar Pradesh.	T=3.915 P=0.001	Rejected
35	$H2_{bo}$	Venture capital funding will make no difference in making industrial unit in Uttar Pradesh more competitive.	T= 4.216 P=0.009	Rejected
36	$H3_o$	Government cannot promote venture capital funding in Uttar Pradesh.	T= 3.533 P=0.03	Rejected
37	$H4_o$	Syndication cannot promote venture capital funding in Uttar Pradesh.	T= 2.69 P=0.017	Rejected
38	$H5_{ao}$	Entrepreneurs in Uttar Pradesh do not face problems in raising equity capital.	T=15.73 P=0.000	Rejected
39	$H5_{bo}$	Entrepreneurs in Uttar Pradesh do not face problems in raising debt capital.	T=19.38 P=0.000	Rejected
40	$H5_{co}$	Entrepreneurs in Uttar Pradesh face no significant difference between problems in raising equity capital and problems in raising debt capital.	P=0.779	Accepted
41	$H5_{d1o}$	The problems faced in raising equity capital does not	F=0.892	Accepted

		differ age- wise.	P=0.445	
42	H_{d2o}	The problems faced in raising debt capital does not differ age- wise.	F=0.639 P=0.590	Accepted
43	$H5_{e1o}$	The problems faced in raising equity capital does not differ location wise.	F=1.127 P=0.346	Accepted
44	$H5_{e2o}$	The problems faced in raising debt capital does not differ location wise.	F=0.986 P=0.435	Accepted
45	$H5_{f1o}$	Problems faced in raising equity capital does not differ gender wise.	F=0.423 P=0.516	Accepted
46	$H5_{f2o}$	Problems faced in raising debt capital does not differ gender wise.	F=0.463 P=0.497	Accepted
47	$H6_{ao}$	Entrepreneurs in Uttar Pradesh do not face problems in raising venture capital.	P=0.000 T=5.46	Rejected
48	$H6_{bo}$	For the entrepreneurs of Uttar Pradesh the problems faced in raising venture capital does not differ age-wise.	F= 0.423 P=0.516	Accepted
49	$H6_{co}$	For the entrepreneurs of Uttar Pradesh the problems faced in raising venture capital does not differ location-wise.	F=1.384 P=0.221	Accepted
50	$H6_{do}$	For the entrepreneurs of Uttar Pradesh the problems faced in raising venture capital does not differ gender-wise	F=1.639 P=0.201	Accepted
51	$H7_{ao}$	Entrepreneurs in Uttar Pradesh do not expect non-financial assistance from venture capitalist	P=0.001 T=3.33	Rejected
52	$H7_{bo}$	For the entrepreneurs of Uttar Pradesh the assistance expected from venture capitalist does not differ age-wise.	F=2.655 P= 0.048	Rejected
53	$H7_{co}$	For the entrepreneurs of Uttar Pradesh the assistance expected from venture capitalist does not differ location-wise.	F=0.609 P= 0.723	Accepted
54	$H7_{do}$	For the entrepreneurs of Uttar Pradesh the assistance expected from venture capitalist does not differ gender-wise.	F=0.672 P= 0.413	Accepted

Chapter 6 Conclusions and recommendations

6.1 Conclusions - Venture capitalists find investment proposals from Uttar Pradesh attractive enough in terms of the entrepreneurs, products and services, target market and deal, but venture capitalists are not satisfied by the regional features. Venture capitalists can help in development of Uttar Pradesh and venture capital can be promoted by government and through syndication. Entrepreneurs in Uttar Pradesh face problems in raising equity, debt and venture capital irrespective of their age, location and gender and expect non-financial from a venture capitalist.

6.2 Recommendation

The following are the recommendations to the government of Uttar Pradesh

1. Provide better infrastructure- Infrastructure facilities should be improved.
2. Establish incubators- government should set up more incubation centers.
3. Improve manpower issues - As investments of venture capitalist are in new and emerging areas they may face a shortage of manpower. Government should undertake policies to ensure the availability of manpower.
4. Faster clearance of investment proposals and more transparency and stability in the policies - In a competitive environment, good governance is as an important pre-requisite for attracting investment.
5. Provide Tax concessions- government can provide monetary incentives in the form of cheap land and tax concession to investment proposals financed by venture capitalists.
6. Establish state dedicated venture capital funds - As proposed in the industrial policy of UP-2004, a state dedicated venture capital fund should be established in Uttar Pradesh.
7. Establish special cell to oversee venture capital investment in Uttar Pradesh – There should be a special cell to oversee venture capital investments.
8. Persuade venture capitalist to open offices in Uttar Pradesh -. If venture capitalists open their offices in Uttar Pradesh they may fund more investments from Uttar Pradesh.

The following are recommendations to the entrepreneurs of Uttar Pradesh

1. Venture capitalists are unapproachable-. Entrepreneurs should try to approach venture capitalists through some references.

2. Venture capital is a costly source of raising capital – cost is high as venture capitalist also provides non-financial help to improve chances of success of a business.
3. Venture capitalist interferes in business decisions – They use their expertise so that the venture has better chances of being successful.
4. Funds requirement for new venture are too small - the entrepreneur can approach micro venture capital funds such as Aavishkaar India micro venture capital fund.
5. Negotiations with venture capitalist are time consuming-venture capitalists evaluates and investment opportunity, which can take time.
6. Chances of obtaining finance from Venture Capital are low- Entrepreneurs should ensure that their proposal fulfills the investment criteria and approach the venture capitalists considering the area of interest of venture capitalists and the stage of their business.

The following are recommendations to the venture capitalist

1) Venture capital should syndicate investments- it provides a number of benefits to venture capital investments it can be used for funding investment proposal from Uttar Pradesh.
2) Open offices in Uttar Pradesh- If venture capitalists consider opening offices in Uttar Pradesh it may help them in not only financing and monitoring projects in Uttar Pradesh but aid in their operation throughout eastern India.
3) Educate entrepreneurs on the concept of venture capital and problems faced - This will help entrepreneurs to appreciate the nuances of venture capital.
4) Reduce their minimum funding size per deal – The average size of venture capital investment in the year 2006 was $7mn Rs 35 crores (IVCA, 2006). This is beyond the requirement of most entrepreneurs.
5) Fund more investment proposals - There can be opportunities to finance investment as Uttar Pradesh has number of reputed scientific and industrial research institutes.

6.3 Limitations of the study

This study on the problems and prospects of Venture Capital in Uttar Pradesh has a number of limitations, which can be stated as follows:

1) Empirical findings related to the problems and prospects of venture capital might differ from the perception.

2) As no previous studies exist for Uttar Pradesh, this study uses the criteria and issues highlighted in previous studies conducted for different parts of the world.
3) This study relies on information reported by venture capitalist. Several scholars have criticized studies based on venture capitalists' self reports.
4) Venture capitalists are not rational decision makers (Sahlman & Stevenson1985) they may suffer from preconceived notions, which may affect their responses in this study.
5) Perception of venture capitalist pertaining to the economic growth might differ from the empirical findings. But even with empirical research assessing the economic impact of venture capital becomes quite difficult,
6) Venture capitalists have stated how Uttar Pradesh government can promote venture funding in the state of Uttar Pradesh. But the state government cannot undertake all such decision without the support of central government.
7) This study uses survey method to collect data from a sample. The time and cost factor restricts the size of sample. A small sample may not represent the population correctly. Bias may occur if the sample selected for study is not really representative of the population.

6.4 Directions for future research

The following are some of the further studies that can be carried out on venture capital.

1) Further studies can be conducted having a sector specific focus, which may provide deeper insights.
2) This study finds the prospects of Venture Capital in general irrespective of the funding stage. Further studies can be conducted stage-wise for venture capital Funding.
3) Many other issues related to venture capital, which have been discussed in literature review chapter 3, can be studied in future research.
4) This study is based on the perspectives empirical research can be carried out to gain further insights into the research topic.
5) Problems and prospects of venture capital can be studied for other states as well.

VENTURE CAPITAL IN UTTAR PRADESH: PROBLEMS AND PROSPECTS

THESIS

SUBMITTED FOR THE AWARD OF THE DEGREE OF

Ph. D. (Business Administration)

BY

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Valeed Ansari 17/01/09
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5 September 2008

CERTIFICATE

This is to certify that the thesis titled **"Venture Capital in Uttar Pradesh: Problems and Prospects"**, submitted to the department of business administration, Faculty of Management Studies and Research, Aligarh Muslim University, Aligarh is a record of original research work done by **Mr. Ahmar Uddin Mohd**. During the period of his study with department of business administration, Faculty of Management Studies & Research, Aligarh Muslim university under my guidance and that the thesis has not formed the basis for award of any degree/diploma/associate ship/fellowship or other similar title to any candidate of any university/institution.

Jamil

Prof. (Dr.) Syed Ahsan Jamil
External Advisor
Director

DECLARATION

I do hereby declare that the thesis titled "Venture Capital in Uttar Pradesh: Problems and Prospects", submitted to the department of business administration, Faculty of Management Studies & Research, Aligarh Muslim University, Aligarh for the award of the degree of Doctorate in Business Administration is original research work carried out by me under the guidance of Dr. Valeed A. Ansari, internal advisor, Reader, Department of Business Administration, Faculty of Management Studies & Research, Aligarh Muslim University, Aligarh and Dr. Syed Ahsan Jamil, external advisor, Director, Institute of Productivity and Management,Lucknow. The thesis has not formed the basis of award of any degree/diploma/associate ship/fellowship or other similar title to any candidate of any university/institution.

Place LUCKNOW

Date 15/01/09

Ahmar Uddin Mohd.

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As I look back on the journey of writing this dissertation, I am reminded of my own smallness. So it is with the most genuine gratitude that I wish to acknowledge the encouragement of friends, family, and colleagues – all of you who have taken an interest in my project and whom I know now will share the joy of its completion.

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Last but not least, the greatest thanks go to my family, who has uncomplainingly spared me for this visionary project.

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Thank you, Almighty God, for granting me strength and wisdom to complete this study.

Ahmar Uddin Mohd.

Lucknow, UP, India, January 2009

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ABBREVIATIONS

APIDC	Andhra Pradesh Industrial Development Corporation
APARC	Asia Pacific Research Center
ARDC	American Research and Development Corporation
AVCA	Asian Venture Capital Association
AVCJ	Asian Venture Capital Journal
BRIE	Berkeley Round Table on the International Economy
BVCA	British Venture Capital Association
CBDT	Central Board Of Direct Taxes
CVCF	Captive Venture Capital Firms
DIC	District Industries Center
EU	European Union
FIPB	Foreign Investment Promotion Board
FVCI	Foreign Venture Capital Firms
GVCL	Gujarat Venture Capital Finance Limited
HMSO	Her Majesty's Stationery Office
IDBI	Industrial Development Bank of India
IFCI	Industrial Finance Corporation of India
IL&FS	Infrastructure Leasing and Financial Services
IPO	Initial Public Offering
IVCA	Indian Venture Capital Association
MBO	Management Buy Out
MIT	Ministry of Information Technology
MITI	Ministry of International Trade And Industry
MOF	Ministry of Finance
MoU	Memorandum of Understanding
NASDAQ	National Association of Security Dealers Automated Quotation
NBER	National Bureau of Economic Research
NRI	Non Resident Indian
NVCA	National Venture Capital Association of America

OECD	Organization for Economic Corporation and Development
OTC	Over The Counter
RBI	Reserve Bank of India
PICUP	Pradeshiya Industrial and Investment Corporation of Uttar Pradesh
RICAFE	Risk Capital and The Financing of European Innovative Firms
RCF	Risk Capital Foundation
SEBI	Securities Exchange Board of India
SAGIA	Saudi Arabia General Investment Authority
SBA	Small Business Administration
SBIC	Small Business Investment Company
SIDBI	Small Industrial Development Bank Of India
SSRN	Social Science Research Network
TDICI	Technology Development and Investment Corporation of India
TiE	The Indus Entrepreneur
UP	Uttar Pradesh
UPFC	Uttar Pradesh Financial Corporation
UTI	Unit Trust of India
VC	Venture Capital
VCF	Venture Capital Fund

OECD	Organization for Economic Corporation and Development
OTC	Over The Counter
RBI	Reserve Bank of India
PICUP	Pradeshiya Industrial and Investment Corporation of Uttar Pradesh
RICAFE	Risk Capital and The Financing of European Innovative Firms
RCF	Risk Capital Foundation
SEBI	Securities Exchange Board of India
SAGIA	Saudi Arabia General Investment Authority
SBA	Small Business Administration
SBIC	Small Business Investment Company
SIDBI	Small Industrial Development Bank Of India
SSRN	Social Science Research Network
TDICI	Technology Development and Investment Corporation of India
TiE	The Indus Entrepreneur
UP	Uttar Pradesh
UPFC	Uttar Pradesh Financial Corporation
UTI	Unit Trust of India
VC	Venture Capital
VCF	Venture Capital Fund

PREFACE

In a scenario where newer technologies are being developed at a fast pace the future growth of any economy depends to a large extent on how fast technical innovations can be commercialized. But new and untried ideas have a high level of uncertainty and thus are not able avail funds from the traditional financial sources such as equity and debt. Therefore there is a need to explore other sources of funds suitable for financing new and innovative proposals.

Financial intermediaries such as venture capital funds can promote technological innovation and industrial growth by providing risk capital and funds to those entrepreneurs who have the highest probability of developing new products, production processes and competitive production facilities. Studies conducted on venture capital have highlighted its role related to the various aspects of economic development along with the problems faced in venture capital funding.

The present research tries to study the problems and prospects of venture capital for an economically underdeveloped state such as Uttar Pradesh. This thesis is divided into six chapters. Chapter 1 introduces the concept of venture capital, which emerged as a source of finance in USA after the II world war and has subsequently been used in different parts of the world.

Chapter 2 highlights the economic conditions of Uttar Pradesh. It shows that Uttar Pradesh lags behind other developed states on various economic parameters. Further it has been suggested that industrialization is necessary for the economic development of Uttar Pradesh.

Chapter 3 focuses on the existing research related to the problems and prospects of venture capital. It starts by stating the role of venture capital in economic development and value creation. After which the issues in venture capital funding are discussed.

Finally an overview of the investment criteria used by venture capitalist in previous studies is discussed and the limitations of venture capital funding are stated.

Chapter 4 deals with the research methodology. It focuses on the justification of the study and it highlights the methods used in the study.

Chapter 5 presents the analysis of data collected in this study. Firstly, a descriptive analysis of the underlying variables is presented which is followed by statistical analysis of the data collected from the venture capitalist and the entrepreneurs.

Chapter 6 gives the conclusions and recommendations, which are followed by the limitations and directions of future research.

Ahmar Uddin Mohd.

Chapter 1

Venture Capital - Concepts

1.1 Introduction

The activity of financing entrepreneurs has actually existed almost as long as entrepreneurs themselves. The two most important and established sources of finance for small firms are the owners themselves (Rosen, 1998) and commercial banks (Meyer, 1998). Funding of business ventures usually poses a dilemma for entrepreneurs because to begin with, many a times entrepreneurs do not have funds to finance ventures from their own funds and then, in general private banks are also usually unwilling to lend money to a small and newly established firms (Rangarajan, 1980).

Venture capital is source of finance, which can help an entrepreneur in obtaining funds for business. Venture capital has some unique characteristics that separate them from traditional sources of funds. Their investments which are in startups firms have **firstly;** a higher level of uncertainty, **secondly**; they have substantial asymmetric information, and **thirdly**; they typically have higher intangible assets and growth prospects.

1.2 Definition of venture capital

Venture capital as the name suggest is the provision of capital for business ventures. It supports entrepreneurial talent with funds and business skills to exploit market opportunities with an aim to obtain capital gains.

Venture capital is a form of intermediation particularly well suited to support the creation and growth of innovative, entrepreneurial companies (Hellmann & Puri 2000, 2002; Kortum & Lerner, 2000). It specializes in financing and nurturing companies at an early stage of development (start-ups) that operate in high-tech industries. For such companies the expertise of the venture capitalist, its knowledge of markets and of the entrepreneurial process, and its network of contacts are most useful to help unfold their growth potential

(Bottazzi, Da Rin & Hellmann, 2004; Gompers, 1995; Hellmann & Puri, 2002; Lerner, 1994, 1995; Lindsey, 2003).

There are various consistent definitions of venture capital; Chris (1990) has defined Venture capital as the provision of risk bearing capital, usually in the form of a participation in equity, to companies with high growth potential. In addition, the venture capital company provides some value added services in the form of management advice and contribution to overall strategy. The relatively high risk of the venture capitalist is compensated by the possibility of high return, usually through substantial capital gains in the medium term. In India Pandey (1995) have provided the following definition, Venture capital is an investment in the form of equity, quasi-equity and sometimes debt, straight or conditional (interest and principal payable when the venture starts generating sales), made in a new or untried technology, or high risk venture, promoted by a technically or professionally qualified entrepreneur, where the venture capitalist

- Expects the enterprise to have a very high growth rate
- Provides management and business skills to the enterprise
- Expects medium to long term gains
- Does not expect any collateral to cover the capital provided

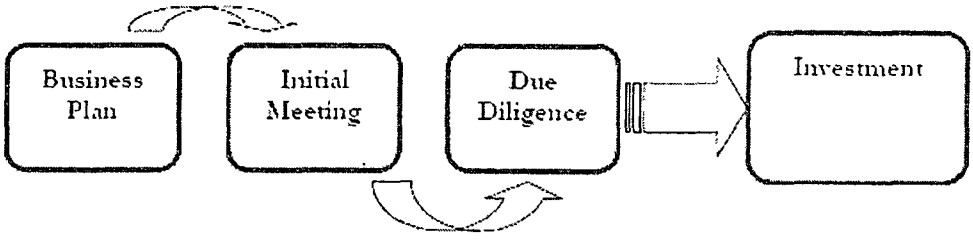
Another definitions of venture capital as per Wright & Robbie (1998), **"venture capital is investment by professional investors of long-term, unquoted, risk equity finance in new firms where the primary reward is capital gain supplemented by dividend yield".** Similarly, The United states National Venture Capital Association defines venture capital as "money provided by professionals who invest alongside management in young, rapidly growing companies that have the potential to develop into significant economic contributors" (NVCA, 2002). Gompers & Lerner (1999) define venture capital as the investment activities of professional funds that purchase equity or equity-linked stakes in new, unquoted firms, private equity includes funds devoted to venture capital, leveraged buyouts, consolidations, mezzanine and distressed debt investments, and a variety of hybrids such as venture leasing and venture factoring.

1.3 Process and structure of venture capital

Process of venture capital consists of a number of steps that are undertaken by venture capitalist while investing in a company. They are as follows (Tyebjee & Bruno, 1986; Sagari & Guidotti 1991).

1. **Deal origination**-referral system is an important source of information for VC regarding the potential investors
2. **Screening-of proposals** -regarding their size of investment, geographical location and stage of financing is done for those proposals which are of interest to the VC
3. **Evaluation and due diligence**- the risk and returns are estimated
4. **Deal structuring**-terms of deals are decided. These include details such as the amount of funding, the share the company, the contracts. VC negotiate deals to ensure a returns commensurate with the risk, control the organization, minimize taxes, assure liquidity, and the right to replace management in case of poor performance
5. **Post investment activities and exit**- VC involve themselves in major decisions and steer the company towards exit. Exit can be in four ways, initial public offer, acquisition by another company, and repurchase of the VC's share by the investee company, purchase of the VC share by third party

Figure 1-1 **The Venture Capital Process**



Fichera, 2001

Structure of the venture capital market

There are three major players, which dominate the US venture capital industry:

1) The institutional investor (provider of capital)

2) The entrepreneurial firm that receives the fund (use of capital) and
3) The agency or agent who stands between the two and identifies, screens, transacts monitors and raises additional funds.

The venture capital business model is based on the selection of young growth companies with a good risk-return profile, financing them with external equity or similar forms of capital and nurturing them with management support before selling them at a higher valuation. The venture capitalist tries to collect money from investors. He has to convince the investors by clearly communicating his investment approach (Silver, 1985; Schroeder, 1992)

As shown in figure 1-2 financial capital flows from limited partners such as pension funds, individuals, insurance companies, corporations, into the venture capital funds. When sufficient capital is available the fund is closed and the venture capitalist makes his first call of capital, i.e. investors actually pay a first share of the capital they have committed (Smith & Smith, 2000). The venture capitalist usually calls on the committed capital when there are immediate attractive opportunities for investment thereby ensuring the best performance possible of the fund since there are no opportunity costs that need to be earned on capital that has not been called yet.

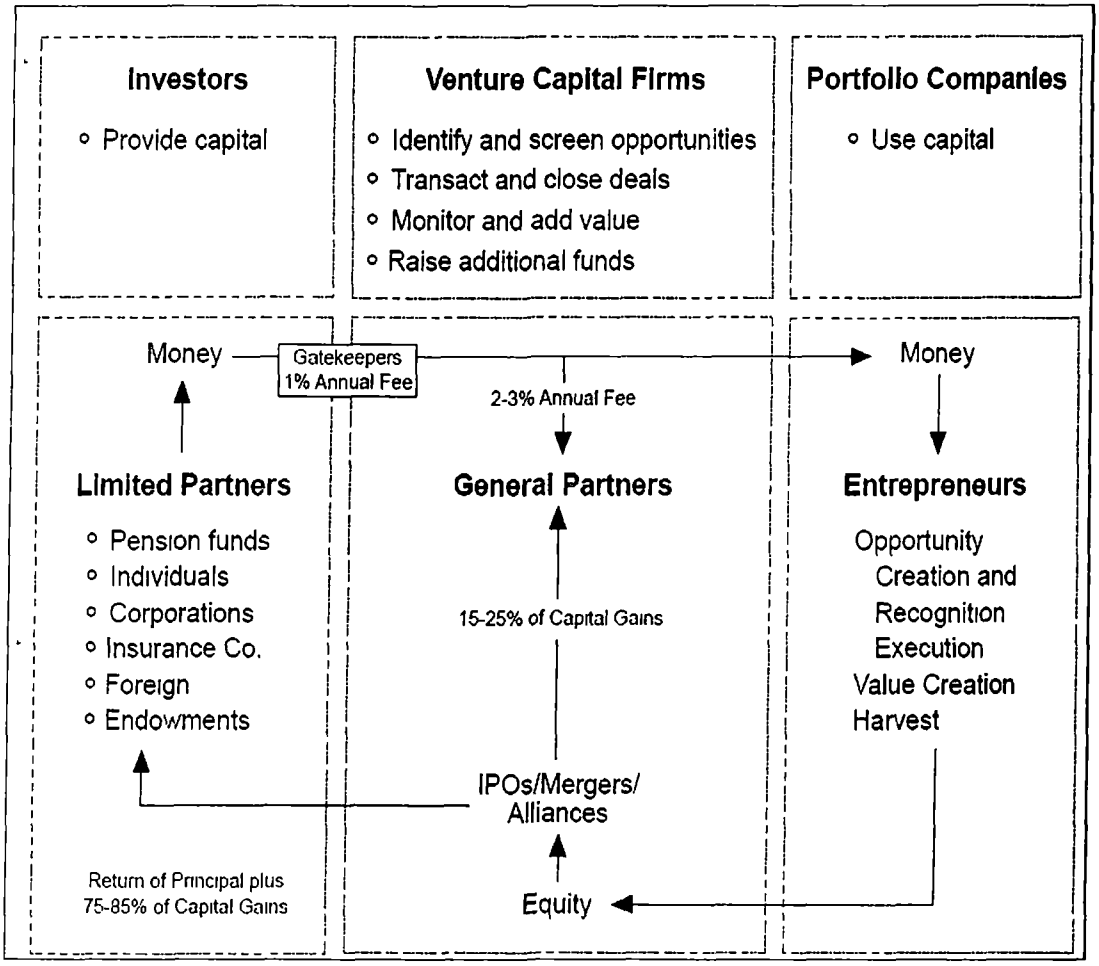
After that the venture capitalist starts to make portfolio investments, which typically lasts two or three years (Smith & Smith, 2000). He tries to create deal flow; i.e. he actively seeks to find potential investee on the one hand, and he tries to promote the fund in order to attract entrepreneurs on the other hand (Silver, 1985).

The next step is the analysis of potential portfolio companies. In this staged process, the ventures are first screened to check whether they fit in the strategy of the VC. If so they then are compared to a number of explicit and implicit criteria and finally a formal and costly due diligence is conducted. If both parties are then still interested in the deal, the conditions of the investment are negotiated and the investment is made.

Also he monitors the portfolio company to ensure an efficient use of the funds provided (Gorman& Sahlman, 1989; Sapienza, 1992; Duffner, 2003).

Finally Venture capitalists seek to exit portfolio companies within approximately ten years after the first closing of the fund.

Figure 1-2 Venture Capital Flows



Adapted from Venture capital and innovations, OECD-1996

The VC process involves transactions charges such as: the annual fee, a 2-3 per cent management fee and 15-20 per cent interest carried on capital gain. These are built-in incentives for the agent to carry out his role because, it is not easy for institutions to make the connection to the entrepreneurial company directly and effectively conclude deals with them.

This, however, leads to a constant tug of war between the Limited Partners and the General Partners. Limited Partners are always suggesting that General Partners are making too much money or that management fees are too high. The General Partners retort with arguments to the contrary. While these terms have stabilized somewhat, there is constant pressure on both sides.

1.4 Stages of Venture capital financing stages

Depending on the requirements of funds of an enterprise, Venture capital funding can be of various types. Classification of venture funding is done depending on how the funds are used by the recipient enterprise. The table shown below outlines the various types of venture capital, the description of project (usage), the duration of financing and the risk involved in venture funding.

Table 1-1: Venture Capital Financing Stages

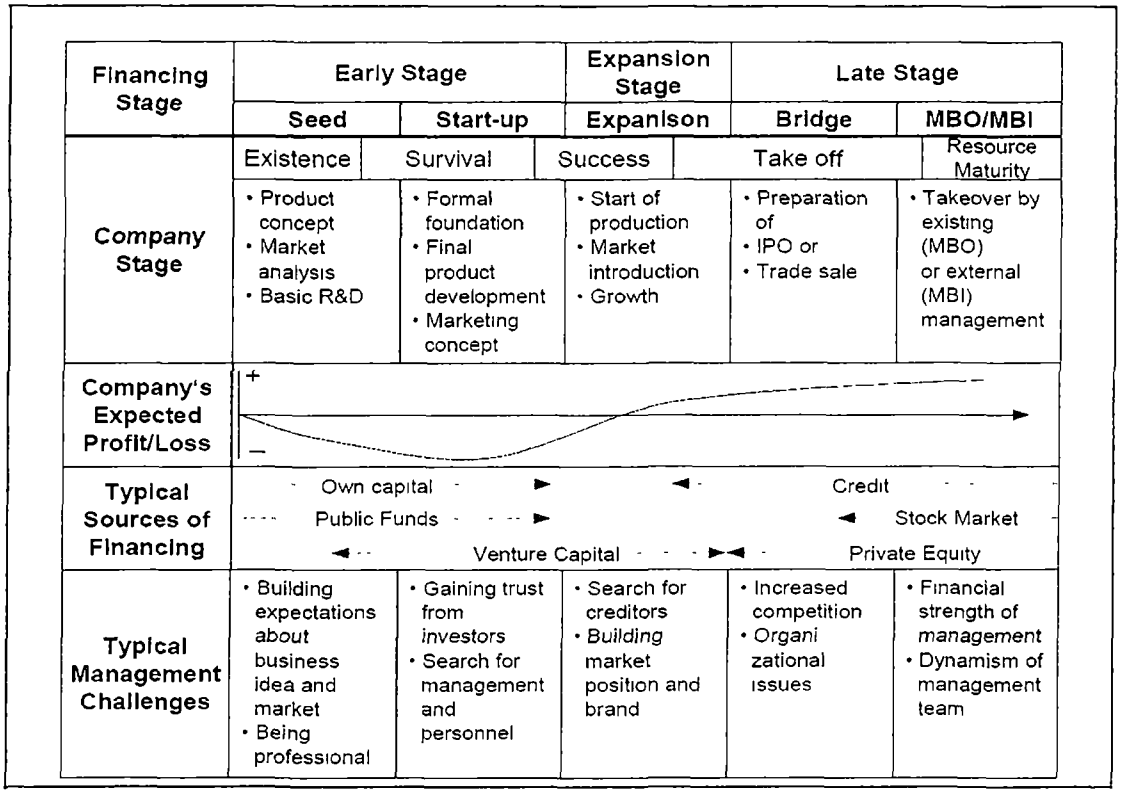
Stage	Venture capital Type	Description status of project	Period	Risk
I	Seed	Supports an idea or concept or R&D	7-10	Extreme
II	Start up	Initiating Operations or developing prototypes	5-10	Very High
III	Expansion	Expansion in Production/marketing	3-7	Medium
IV	Mezzanine	Last stage before public issue	1-3	Low
V	Buy out	Acquisition of a product line business	1-3	Low
VI	Turnaround	Re-establishment of business, turning around a sick company.	3-5	Medium to high

Lorenz, 1989

Stages of Venture capital financing stages and Company life cycle -Growth of an enterprise follows a life cycle and the requirement of funds also varies as per the stage of life cycle. At each stage of a company's lifecycle different funding methods are suitable.

A further explanation of the venture capital stage of financing and the financial requirements of a venture at different stages of its lifecycle are illustrated below. A relationship is shown between the venture capital financing stages, company life cycle stage, the expected profit/loss, sources of financing and the key managerial challenges.

Figure 1-3 **Financing Stages and the Company Life Cycle**



Source: adapted from Duffner, 2003

1.5 Why entrepreneurs opt for venture capital

The most common source of funds for entrepreneur the personal savings, credit cards, loans from friends and family and loans against property. Even though entrepreneurs typically are not able to invest sufficient amounts of money, some may be. But even for them there are high costs involved with it. The entrepreneur's personal fate will be closely tied in with the company. This is because the capital paid in by the entrepreneur is

fully liable. If the entrepreneur finances with equity, the money is fully lost in the case of insolvency. If he finances with debt, many legal environments are very restrictive. Self-finance by an entrepreneur who is not wealthy and uses all cash he can get is called bootstrapping.

The high uncertainties concerning the development of young growth companies, their missing track record concerning the repayment of credits and their inability to provide a collateral are factors that, in combination with a conservative strategy of the banking industry, lead to a situation in which debt capital for young growth companies, at least in the early stages of their development is virtually not available.

Entrepreneur faces problems in raising funds from capital markets and lending institutions because:

1. Many start-up firms require considerable capital. A firm's founder may not have adequate funds to finance these projects single-handedly and might therefore seek outside financing. Entrepreneurial firms are characterized by significant intangible assets, expect years of negative earnings and have uncertain prospects. Such firms are usually unlikely to receive bank loans or other debt financing. (Gompers & Lerners, 1999). This problem is further compounded when the lending institutions are in the public sector and open to wide public scrutiny, thus they tend to be risk averse. (Planning Commission New Delhi, 2006).
2. Early stage ventures cannot depend on the conventional modes of raising equity finance because these are not designed to handle substantial informational asymmetries or to cater to the need for mentoring. Moreover the standard mode of a market flotation may not be a viable option for such ventures, which often start on a small scale. The major issue in the funding of early stage technology ventures is the asymmetry in the information available to the three partners – the technologist, the entrepreneur and the financier. Because of this they may have widely varying perceptions of the prospects for the enterprise. The role of the VC funding system is to devise financing and management agreements that accommodate these variations in information and perceptions. The informational asymmetries make it difficult to raise debt type financing for early stage ventures. Early stage ventures often have a

low equity base and lack a cash flow, which can sustain debt finance. Hence the classical route of loan financing from a development finance institution will not work.

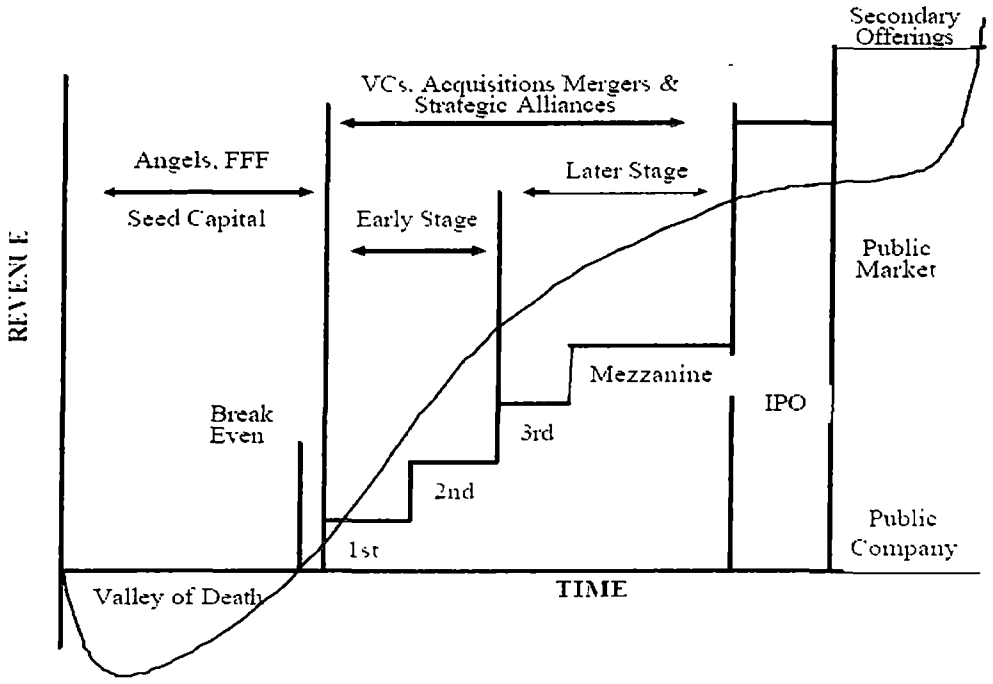
3. Capital markets overlook small business opportunities because of high information and transaction cost (Premus, 1985; Smith & Smith, 2002).
4. Risk measured in terms of the default rate is high for new enterprise (Rangarajan, 1980). In developing countries the default rate has been found to vary between 10 to 60 percent (Anderson, 1982). Due to the high-risk lenders is reluctant to fund such enterprises).
5. Lenders require collateral for giving loans and most entrepreneurs of new enterprises are unable or unwilling to provide adequate security (Pandey, 2003).
6. The literature on capital constraints documents that an inability to obtain external financing limits many forms of business investment. (Glenn, 1996). These show that capital constraints appear to limit research-and-development expenditures, especially in smaller firms. (Hall, 1992; Hao & Jaffe 1993; Himrnelberg & Petersen 1994).

Inadequate supply and high costs of SMEs funding, the so-called 'SME finance gap', often leads to a shortage of firms between the smallest micro-enterprises and larger firms. The problem of the 'missing middle' is often worsened by government policies that favor larger firms for financial access, for example, through collateral requirements imposed on the banking sector.

Given the fact that lack of financing is typically most prominent at early stages of enterprise development, measures, either directly through subsidies or indirectly through participation in private sector projects, are crucial at this stage. As the figure 1-4, below demonstrates, this early stage represents the so-called 'Valley of Death', which can be bridged by venture capital funds.

On the other hand the problems in financing of new start ups proves to be beneficial to VC. In the light of empirical data, Amit et al. (1998) concluded that venture capitalists exist because the market for entrepreneurial finance is characterized by informational asymmetries and moral hazard. Because venture capitalists can reduce these market failures, they have an advantage over other investors in providing funds for new ventures.

Figure 1-4 **Financing Cycle**



Source: Cardullo, 1999.

1.6 Evolution Of Venture Capital

Literature related to the evolution of Venture capital highlights the peculiar problems it faced in different parts of the world and the pivotal steps, which led to its establishment.

For centuries, wealthy individuals have invested in risky ventures in the hopes of securing good returns. Such investments can be traced back at least as far as the involvement of merchants in organizing syndicates to finance long-distance trading ventures. The financing for firms participating in the industrial revolution came from merchants and other wealthy individuals willing to back entrepreneurs in building manufacturing facilities or exploiting a new technology (Kenney 2000).

Prior to World War Two, the source of capital for entrepreneurs everywhere was either the government, government-sponsored institutions meant to invest in such ventures, or informal investors as termed" Angels" (individuals who are not professional investors in startups.) and usually had some prior relationship to the entrepreneur (Kenney & Burg, 2000). The term, "Venture Capital" was first used by Jean Witter, during his presidential address to the 1939 Investment Bankers Association of America convention (Reiner,

1989). In general, throughout history private banks have been unwilling to lend money to a newly established firm, because of the high risk and lack of collateral. During the 1930's in both the U.S. and the U.K. there were discussions of the lack of investment capital for small businesses. In U.K., the 1931 Macmillan Report identified a shortage of private sector funds for supporting small business. The report started a debate both in U.K. and U.S discussing how funds can be provided for the small businesses, which were severely affected by the depression.

1.6.1 Venture capital in USA

After World War Two, a set of intermediaries emerged in the U.S. who specialized in investing in young firms having the potential for extremely rapid growth. From its earliest beginnings on the East Coast of U.S. venture capital gradually expanded and became an increasingly professionalised institution. During this period, the locus of the venture capital industry shifted from New York and Boston on the East Coast to Silicon Valley on the West Coast Florida (Richard & Martin Kenney, 1998a).

The first venture capital funds were family owned set up by wealthy families, such as the

- **Rockefeller family**, L S Rockefeller in particular, whose investments included the eastern airlines which was one of the earliest commercial airlines
- **J. H Whitney & Company's**, Jock Whitney is also considered as one of the industry's founders.
-

These families established offices and hired professional managers to discover, evaluate, and invest in small companies with superior growth prospects. Though each of them changed many of their organizational characteristics, some of these funds are still active; Rockefeller (Venrock) and Whitney (J.H. Whitney) funds are still there.

The origins of the formal venture capital industry are generally identified with the American Research and Development Corporation (ARDC), which was formed in 1946. George Doriot of Harvard business school and MIT President Karl Compton spearheaded ARDC. ARDC made high-risk investments into emerging companies that were based on technology developed for World War II. ARDC was not only the first but also one of the

most successfully VC firms. ARDC's objective was stated to be "build creative men and their companies. The capital gain was a reward not a goal. ARDC served a the first venture capital fund, acting as a financial intermediary for investors wishing to invest in new and growing business. Its first investment worth $6 million in shares of digital equipment corporation, a new company at that time grew phonemically in the market value to return $360 million. (Gompers and Lerner, 1999)

The second major important step in development of venture capital was the enactment of the small business act 1958, by US government, which led to the formation of small business investment companies (SBIC). It permitted individuals to form SBICs with private funds as paid-in capital and then they could leverage their paid in capital to borrow money up to a limit that increased over time with government guarantees. There were also tax and other benefits, such as income and a capital gains pass-through.

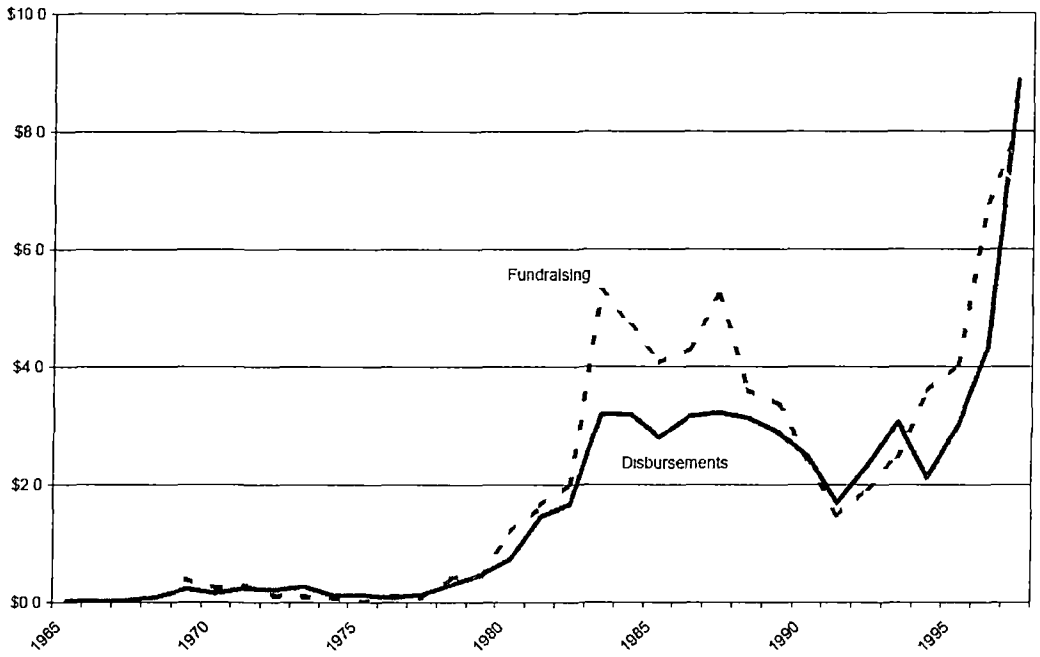
The SBIC program also provided a vehicle for banks to circumvent the depression-era laws prohibiting commercial banks from owning more than 5 percent of any industrial firm. The banks' SBIC subsidiaries allowed them to acquire equity in small firms. This made even more capital available to fledgling firms, and was a significant source of capital in the 1960s and 1970s. The final investment format also permitted SBICs to raise money in the public market. (Gompers and Lerner 1996, 1998)

The SBIC program experienced serious problems. One problem was that as a government agency it was very bureaucratic having many rules and regulations that were constantly changing. The situation deterioted to such an extent that, in 1965 Federal criminal prosecution was necessary to rectify the misappropriation of funds, incompetence, and fraud undertaken by some SBICs. By one estimate, "nine out of ten SBICs had violated agency regulations and dozens of companies had committed criminal acts" (Bean 2000). Many public SBICs failed and/or were liquidated by the mid-1970s. After the mid-1970s, with the exception of the bank SBICs, the program was no longer important to the venture capital industry (Kenney, 2002).

Despite the corruption, something valuable also occurred. Particularly in Silicon Valley, several individuals used their SBICs to leverage their personal capital, and they were so successful that they were able to reimburse the program and raise institutional money to become formal venture capitalists. The SBIC program accelerated their capital accumulation, and as important, government regulations made these new venture capitalists professionalize their investment activity, which had been informal prior to entering the program. Now-illustrious firms such as Sutter Hill Ventures, Institutional Venture Partners, Bank of America Ventures, and Menlo Ventures began as SBICs.

During the 1960s venture capital firms assisted by the bull-run invested in companies and generated good returns. In late sixties venture capital had a capital pool of 2-3 billion US dollar. Public was ready to accept shares of venture backed companies and it was not unusual to find investments returning of 10 to 20 times.

Figure 1-5 Figure: Venture Capital Fundraising and Disbursements, 1965-1997 in billions of US $



Source: AVCA

The seventies however saw a decline in venture capital investments. Firstly due to the poor conditions of stock market and later in 1974 congress legislation prevented the use of pension money in risky investments. Poor valuations and lack of funds gave a blow to venture funding. The downside continued till 1978, after which the US government changed the tax laws. The capital gain tax was reduced from 49.5 to 28 percent, which was further reduced to 21 percent in 1984. During the same period labor department issued a clarification removing the obstacle of pension fund's investment in venture capital. The US government permitted pension funds to invest 2 % of their total assets in high-risk ventures such as venture capital. A number of IPO's by ventured backed firms like federal express and apple computers revived investor's interest in venture capital.

Main reasons for the success of VC in USA can be summarized as (OECD 1986):

1. Favorable public orientation towards entrepreneurship along with a constant flow of opportunities, which have great up-side potential.
2. A dynamic financial market, which provided financial support from other sources such as, bank financing and exiting the investment through IPO's.
3. Government support- the US government played an important role in the development of venture capital. Its role can be classified under two heads, direct and indirect.
    - **Direct** - Passing the Small Business Investment Act of 1958 authorizing the creation of small business investment corporations (SBICs). The legislation was not intended to encouraging venture capital but as it meant to create a vehicle for funding small firms of all types, it also ended up benefiting the venture capital firms. Small Business Investment Company (SBIC) program led to the provision of more than $3 billion to young firms between 1958 and 1969, more than three times the total private venture capital investment during these years (Noone & Rubel, 1970).

    - **Indirect-** U.S. tax policy, though it changed repeatedly, has been favorable to capital gains, and several decreases in capital gains taxes may have had some positive effect on the availability of venture capital (Gompers, 1994).

i) U.S. government's monetary and fiscal policies ensured relatively low inflation; as a result, the financial environment and currency were stable.

ii) Stable financial environment along with a well-regulated and transparent stock market provided favorable conditions for venture backed firms to exit through IPO's.

The above steps i) and ii) created a general macroeconomic environment of financial stability and openness for investors, thereby reducing the external risk of investing in high-risk firms.

iii) Funding of research programs in universities, which created a pool of students in sciences and engineering. Research from these students provided innovations, which were subsequently funded by venture capital. U.S. universities, such as MIT, Stanford, and UC Berkeley, played a particularly salient role in coming up with new innovations (Kenney & Burg 1999).

1.6.2 Venture capital in Europe

Venture capital in Europe started in the eighties and around 75 percent of venture capital is confined to three countries namely UK, France and Netherlands. (Pandey, 1996)

- **United Kingdom** -has an old history of financing new and risky ventures that dates back to the late 18th and early 19th century. Inventors such as Stephenson, Arkwright, Crompton and Brunel found wealthy investors to back their projects. However the first venture capital in its true sense was Charterhouse, which was launched by in 1930s. It was the first professionally managed fund in UK to financing young and growing small business.

In 1945 ICFC was established to carry out the functions envisaged in the Lord Macmillan report. This report had identified that a funding gap exists for new ventures. ICFC's aim was to bridge the gap in funding of new ventures. Its name was subsequently changed to "investors in industry" or 3i. About two-thirds of financing went to small firms in the form of loans and equity investments. The returns were mostly in the form of interest and

dividend rather than only through capital gains. Many funds were launched but most of the funds were unsuccessful. In 1981 rules of investment trust and investment companies were liberalized making it easier to invest in unlisted securities such as VC. British government provided the following tax relief to investors in venture capital trust (Ramesh & Gupta, 1995).

1. Exemption from income tax on dividends from shares in Venture Capital Trusts.
2. Subscribers of new shares in Venture Capital Trusts were also entitled to claim income tax relief at a lower income tax rate.
3. Exemption from capital gains tax when shares are sold.

Table 1-2 *Funds Raised by Venture Capital Trust in UK (in millions of pounds)*

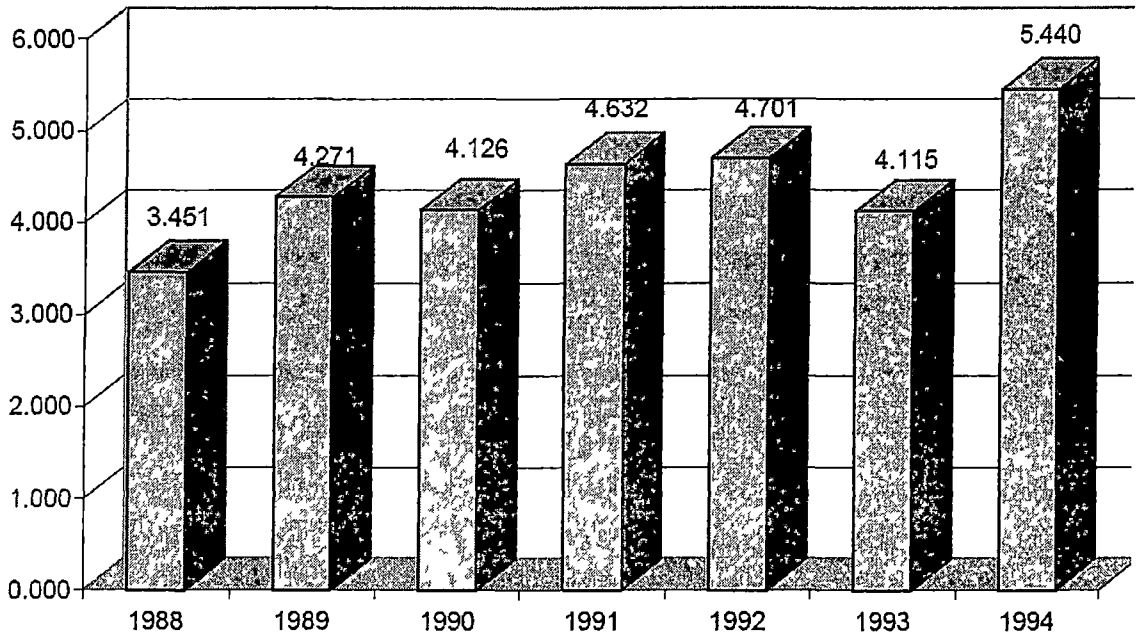
Year	1995-96	1996-97	1997-98	1998-1999	1999-2000
Funds Raised	101.4	148.2	198.7	159.8	301.7

EVCA, 2005

- **France**-in 1972 societies financiers d'innovation, (SFI) was formed with numerous fiscal advantages such as setting 50 percent of their new investments against taxable income. SFI was not highly successful. However development of financial instruments such as warrants and options have helped venture capital industry in France.

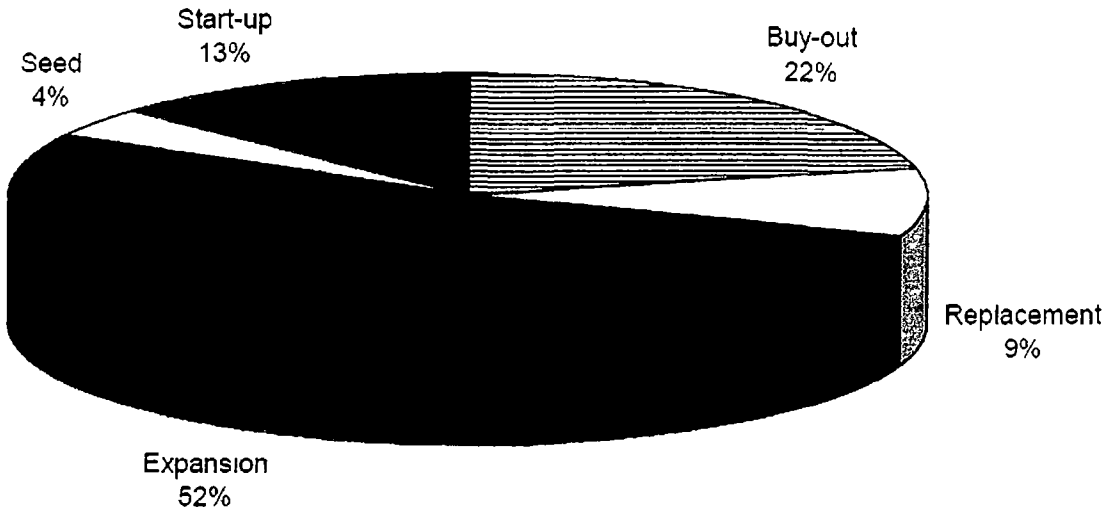
- **Netherlands**- the government took two major initiatives to give a fillip to the VC. In 1981 the government established a number of funds to provide risk capital to small-scale sector where up to half of the risk government indemnifies. Secondly in 1982 it established a parallel market, which was a kind of second tier market with lenient listing requirements. These two measures have given a boost to venture capital investments.

Figure 1-6 **Annual European Venture Capital Investment 1988-94 ($mn)**



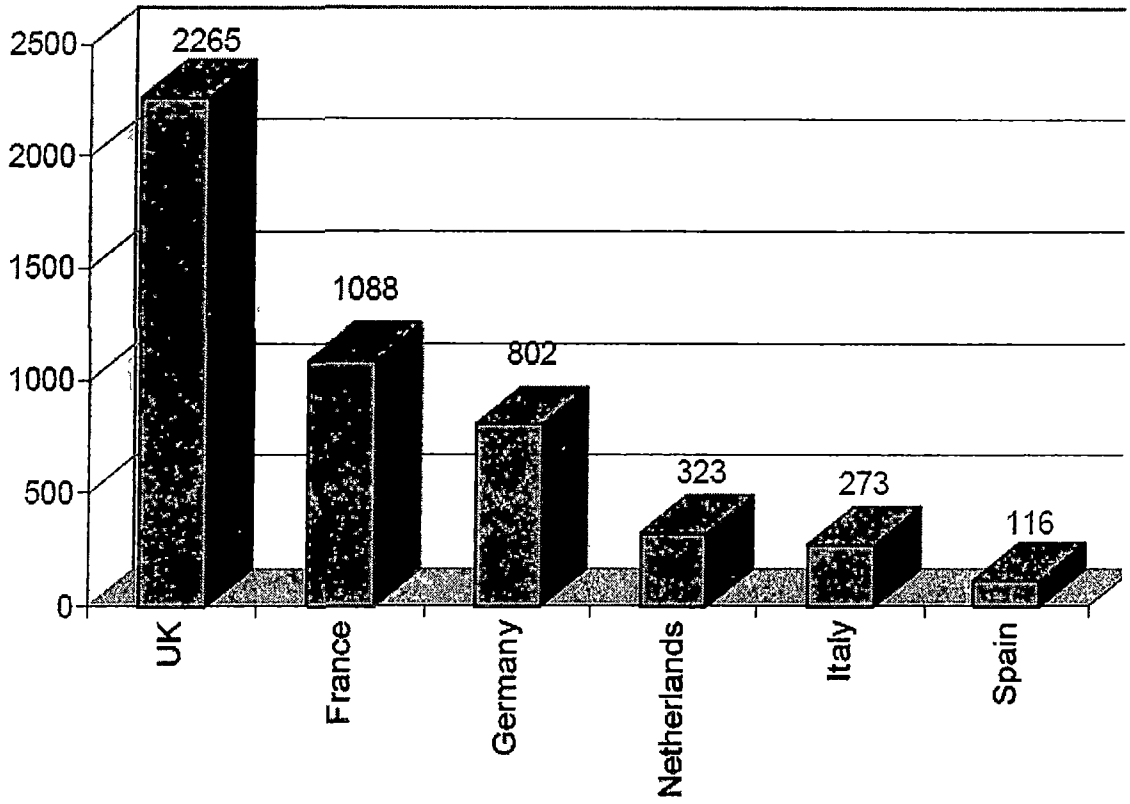
Source: Ernst and Young, 2006

Figure 1-7 **Stage wise distribution by percentage of investments, 1994**



Source: Ernst and Young, 2006

Figure 1-8 **Amount Invested by Country 1994**



Source: Ernst and Young, 2006

1.6.3 Venture Capital in Asia and Pacific Region

Venture capital in Asia and pacific region-venture took off in the 1960 when Japan started SBICs (small business investment companies), which was followed by Australia, Hong Kong, Singapore, South Korea, and Taiwan. Venture capital in Asia grew from $30.6 billion in 1997 to $43.5 billion in 1998 and $65.8 billion in 1999.

Japan has the largest pool of venture capital, followed by Korea, Hong Kong, Australia, China and Singapore (AVCJ 2001). The three largest of venture capital in Asia are corporations, banks and insurance companies. VC has invested in number industries, industrial products, consumer products, electronics and financial services.

The Japanese model of venture capital differs with respect to America and Europe in the following ways (Clarke 1987).

i) Small enterprises face competition from large enterprises. As large enterprises are also able to spot and develop new innovations quickly the small enterprises lose their nimbleness edge.

ii) Employees seek permanent employment thereby stick to large cooperation. Small enterprises have difficulty in attracting a talented workforce, as they are unable to provide lifetime employment.

iii) Japanese are averse to forming partnership between strangers for financial gain thus they hesitate in seeking and providing venture funds.

In spite of the above hindrances the ministry of international trade and industry (MITI) of Japan founded SBICs in 1963 and a venture enterprise centre (VEC) in 1974 to promote venture capital. In 1972, the first private venture capital, Kyoto Enterprise Development (KED) was established with investments from 43 prominent companies. Which included Kyoto Stock Exchange, Bank of Kyoto, Tateishi Electric and Industrial Bank of Japan. The motive force behind KED was the Kyoto Association of Corporate Executives that aimed to promote knowledge intensive industries as a regional development strategy. The model for KED was that of the first organized U.S. venture capital organization, American Research and Development. KED was liquidated only four years later, in 1976. In 1972 the Nippon Enterprise Development (NED) was formed by a group of 39 firms including the Japan Long-term Credit Bank, Fuji Bank, Daiwa Bank, and C. Itoh, and included both financial institutions and venture businesses. In 1973 Nomura Securities and 15 other shareholders established Japan Godo Finance, which was the precursor to the present JAFCO. By 2000 there were nearly 180 venture capital companies engaged in venture capital investing in Japan.

South Korea- has been a difficult environment for venture capital. Since the 1960's, there was a deliberate government policy of channeling credit to the Chaebol (large enterprises) with the resultant starving of the SMEs (Lim 1998). These Chaebol also borrowed massive sums from abroad, confident that the government would bail them out. In this environment, SMEs were sacrificed in the name of Chaebol gigantism. Until the early 1990's, Korea had little high technology entrepreneurship as the Chaebol hired all the best personnel and there was no financial, psychological, or social support for

entrepreneurship. Moreover, the Chaebol nearly always absorbed successful SMEs or their key personnel were hired away (Lim, 1998).

After 1986, the environment for venture capital began to change. Some of this change was part of an overall movement to liberalize of the Korean economy. There also were institutional changes in the legal regime, institutional infrastructures, the attitude toward foreign investment, and the willingness of Koreans to undertake new ventures. The Asian financial crisis of 1997 and its aftermath profoundly changed the environment for the Korean government. It shattered several conventional beliefs that were important building blocks for the Korean economy. After this financial crisis, Koreans no longer believed that the larger firms were less likely they were to fail. It also destroyed the unspoken promise of lifetime employment. The crisis challenged the validity of economic model that Korea had followed. Because of this Koreans began to consider other economic models, and the one that was most attractive was typified by Silicon Valley's many startups and abundant venture capital.

As of now government is closely involved and sponsors four VC organizations. About 70 percent of venture capital companies are promoted by subsidies of large corporations, 20 percent by financial corporation and the remaining are independent private companies. Most of the investment is in seed and early stage capital. (AVCJ 2001)

Hong Kong's- venture capitalists manage more capital than any Asian economy outside of Japan, and it is the regional capital center for all of Northern Asia except Japan. Hong Kong does not have any special regulations related to venture capital, but rather has an open, deregulated financial system that is favorable to a wide variety of financial activities.

Taiwan - is smaller than Japan, Hong Kong, and even Singapore in terms of the available venture capital. And yet, in terms of the number of startups and the success of its venture capital investors, Taiwan is the most active spot in Asia for venture investing. The reasons for this are multifaceted and relate to a background of entrepreneurship, linkages with the U.S., and especially Silicon Valley, an early emphasis on electronics as a key

industry, a supportive government, and a national emphasis on education. These factors created an environment in which industrial growth and venture investing combined into a virtuous circle reinforcing the practices of entrepreneurship and venture investing.

Taiwan's policy is to focus on science and engineering education, infrastructure development, encouragement of small enterprises, regulatory tax and legal system. Its Hsinchu science-based industrial park is a great success in promoting entrepreneurship and venture capital. (Dossani & Kenney,2002).

China -Attributes of the Chinese economy appears to be extremely attractive; it is growing rapidly and has the largest Asian domestic market outside of Japan. In addition to above, it is one of the world's largest exporters. It also has a number of very talented scientists and engineers. The government is committed to improving its technology base and opening its market. Moreover, the government has made the establishment of a venture capital community a top priority. It has an abundance of possible opportunities in the following sectors:

1 Firms established to meet domestic demand, often in a joint venture with a foreign firm having a strong brand.
2 Infrastructure investment especially in the telecommunications.
3 Establishing contract-manufacturing operations for the export market.
4 High technology startups drawing upon Chinese engineering talent from universities and research institutes.

There are many venture capitalists, foreign and domestic, which are investing in China using a wide variety of strategies. Moreover, government authorities at every level are attempting to fashion a legal, political, and social environment conducive to venture capital. (Kenney, Han & Tanaka, 2002)

But in spite of the above positives features the Chinese environment is not yet sufficiently mature and stable to be a termed a "favorable" climate for venture investing. Venture investing is still a new practice, and there are only a few examples of successful exits

with returns of 10 times or greater. There appear to be significant profits to be captured, but the risks are very large and many of them are inherently uncontrollable. Investing in China is also handicapped by a lack of experienced professional management talent. Most persons in leadership positions are accustomed to a socialist environment. One might expect the multinational firms operating in China to be a reservoir of talent. However, these subsidiaries are, for the most part, either sales or marketing organizations or manufacturing operations, neither of which provides the multifaceted experience required of a senior manager hired to pilot a startup through its early years. This contributes to a difficulty in assembling a management team, and this will continue to be an obstacle. Also exit from Chinese investments is difficult especially for international investors.

Singapore -Venture capital is, almost entirely, a creation of the government. For the government, the establishment of a venture capital industry is part of an overall strategy aimed at moving its economy into higher value-added segments. In pursuit of this goal, the Singaporean government has undertaken a number of measures to encourage the establishment of a venture capital industry. The most striking measure and the one that will receive the most attention in this report is the investment of over $1 billion of government monies in domestic and foreign venture capital firms. Overall, the Singaporean government has been very active in establishing an environment conducive to the growth of venture capital and high-technology entrepreneurship.

Malaysia has the greatest concentration of venture capital, the most supportive government, and the most significant base of electronics expertise. Since 1972, when Intel opened a chip assembly and test facility in Penang, venture capital-financed Silicon Valley firms have operated factories in Malaysia. So, in relative terms, Malaysia had an advantage of close connections to Silicon Valley. From this one might expect that Malaysia would have been able to attract foreign investors and nurture a flourishing domestic venture capital industry, however, this has not occurred.

Table 1-3 VC Activity in Asian Region – 2003

Country	Amt Invested ($ Mil)	No. Of companies
Japan	$7298	77
South Korea	$3153	21
Australia	$2175	71
China	$1280	44
India	**$774**	**42**
Indonesia	$654	5
Singapore	$502	16
Bangladesh	$473	2
Philippines	$149	4
Hong Kong	$131	7
Taiwan	$38	3

Asian Venture Capital Journal, 2003

1.6.4 Venture capital in Middle East and North Africa (MENA)

Appreciating the role of knowledge-based industries in economic growth government is trying to promote a supporting framework to promote innovations. Venture capital is being touted as a means of facilitating entrepreneurship and innovations. The relevance of VC development in the MENA region is particularly emphasized by the following 3 key challenge and 3 opportunities (As per an OCED study, April 2006).

1. **Addressing unemployment**- as the state is unable to provide employment to all, there is a need to find ways to generate employment. As entrepreneurship can provide employment it should be promoted with the help of venture capital. The role of entrepreneurship in generating employment can be substantiated by the fact that
    a. In Europe during 1991 and 1995, net employment in European venture capital-backed companies increased by 15% annually, whereas net employment in 500 most profitable non-venture capital-backed European companies increased by 2% annually in the same period.

b. Likewise, in the US, employment by venture capital-backed companies increased by 25% on average every year for the period 1989-1993, while employment by non-venture capital backed Fortune 500 companies dropped by a yearly average of 3% in the same time period.

2. **Limited economic diversification**-most of these countries depend on oil and oil based industries and there is a need to diversify into other areas. Venture capital, which can finance knowledge-based innovation, can help in diversification.

3. **Entrepreneurs need financing-** that is not readily available through traditional sources such as bank as indicated by the domestic credit as a percentage of GDP ranges from 49% in Egypt to 73 % in Lebanon well below that of the European Union average of 105%. Venture capital can finance innovations and new entrepreneurs, which find difficulty in procuring bank finance.

Opportunities

1. **Ample liquidity-due the following**
   a. High petrol prices
   b. Lesser investment opportunities worldwide as compared to the tech boom in mid 1990s
   c. Presence of high net worth individuals, which can act as angel investors. Estimates of private wealth of gulf region to be above $1.5 trillion as per the gulf investment house.
2. **Foreign venture capital firms seeking investment**- venture capital firms based in US are seeking to increase their geographical spread. (Deloitte, 2006).
3. **Congruency between venture capital and Islamic finance**-venture capital financing involves risk sharing and share in profits. This is in line with the basis tenet of Islamic finance i.e. prohibition of interest. Shariah compliant organizations like the venture capital bank based in Bahrain have shown remarkable growth. In March 2006, VC Bank associated with American based global emerging market group and Saudi Arabian general investment authority (SAGIA) to form a $100 million venture capital fund.

Funds for venture capital have increased from $545 million in 2000 to $962 million in 2005 an increase of 77% in five years.

Table 1-4 Total venture capital invested in 39 nations in 2001

Country	Venture capital invested ($ million)	Country	Venture capital invested ($ million)
Australia	1,273	Malaysia	80
Austria	47	Netherlands	208
Belgium	112	New Zealand	46
Canada	3,172	Norway	74
China	1,590	Pakistan	0
Czech republic	8	Philippines	24
Denmark	172	Poland	28
Finland	159	Portugal	18
France	635	Singapore	1,052
Germany	1,306	Slovakia	3
Greece	36	Spain	125
Hong Kong	1,864	Sri Lanka	0
Hungary	18	Sweden	270
Iceland	7	Switzerland	85
India	1133	Taiwan	393
Indonesia	9	Thailand	22
Ireland	43	United kingdom	1051
Italy	330	United states	41005
Japan	2148	Vietnam	3
Korea	1695		

* **Asian Venture Capital Journal** 2003, Guide to Venture Capital in Asia, National Venture Capital Association Yearbook 2002, European Private Equity and Venture

Capital Association's annual survey of pan European Private Equity and Venture Capital Activity 2002.

1.7 Venture capital in India

1.7.1 Development of venture capital in India - Development of venture capital in India can be understood in terms of the following phases.

Phase I (Pre 1995) - Formation of TDICI in the 80's and regional fund such as GVCL (Gujarat Venture Finance Limited), Canbank venture capital fund & APIDC in the early 90's

- The discussion of venture capital started in India in 1972 when government examined strategies to promote small and medium enterprises and a committee (NASSCOM 2000).
- In 1975, venture capital financing was introduced in India by IFCI through risk capital foundation (RCF). The aim was to encourage professionals and technologist to form new industries. In 1976 the seed capital scheme was introduced by IDBI.
- The first major analysis on risk capital for India was reported in 1983. When the shortage of funding for new venture was highlighted by a study conducted by scientific research foundation of India. At that time the Indian financial system mainly consisted of state controlled financial corporations and bank operating within the broad frame like bureaucratic controls, socialism, conservatism, risk-averse and slow decisions making. It indicated that new companies often confront serious barriers while entering into the capital market for raising equity finance, which undermines their future prospects of expansion and diversification (Chitale, 1983).
- The need of economic reforms was propelled by government of Rajiv Gandhi elected in 1984, it recognized the failure of old policy and recognized the need to foster all round reforms to enable higher economic growth rate.

- In the 1986-87 budget, a charge of five percent was imposed on all know how import payments for the creation of venture fund by IDBI. ICICI also started venture capital activity in the same year (Pandey, 1995).
- In 1988 the Indian government issued venture capital guidelines, which allowed investors and state controlled bank to establish venture capital subsidiaries. Important guideline of the rules were as follows;
    i. Capital gain was taxed at a rate equivalent to the individual tax rate (which was lower than the corporate tax rate)
    ii. Exit price was not subject to the guidelines of controller of capital issues.
    iii. Private investors were limited to owning 20 percent of the venture capital fund management company.
    iv. Restriction of less than 10 crores investment and a new technology
    v. Funding to new entrepreneur and professionally qualified
    vi. Clearance from ICICI and IDBI
    vii. Approval from controller of capital issues

- World Bank in 1989 observed that in India, the focus on lending rather than equity investments has led to institution finance that has become increasingly inadequate for small and new Indian companies to grow. In view of which it provided $45 million for venture capital investments to TDICI in the 1988 and regional fund such as GVCL, Canbank Venture Capital Fund & APIDC in the early 90's.
- TDICI formed a joint venture with UTI .UTI through act of parliament was given tax pass-through advantage and this merger helped TDICI. UTIs venture capital unit scheme was know as VECAUS
- Performance of venture capital funds
    - TDICI (Technology Development and Information Company of India) financed companies such as VXL, Mastek, Microland and Sun pharmaceuticals.

- GVFL -was promoted by Gujarat industrial investment corporation Ltd. GIIC had a corpus of Rs.24 crores. Its investments were mainly in the state of Gujarat
- Andhra Pradesh Industrial Development Corporation (APIDC)'s venture capital subsidiary is located in Hyderabad. It suffered from all the difficulties of a state owned venture capital fund and had a relatively low return.
- Canara bank's, Canbank Venture Capital Fund, headquartered in Bangalore, and also performed poorly.

All the above funds were weighed down with inexperienced management, regulatory issues, bureaucratic control and political interferences. Of the above funds only TDICI performance was good giving a return of 28 percent from 1988 to 1994 but after that the funds management was also relatively poor like the rest of the funds.

Table 1-5 Evolution of Venture Capital in India

	Phase I	**Phase II**	**Phase III**	**Phase IV**
Time Period	Pre-1995	1995-97	1998-2001	2002 onwards
Key Features	Formation of TDICI	Entry of FVCI	Emergence of India centric VC Firms	US VCs increasing appetite to invest in India
Amount $ Mn	30	125	2847	5239
Number of Funds	8	20	50	75
Primary Stages	Seed, Early-stage and Development	Development	Early-stage and Development	Growth/Maturity
Primary Sources of Funds	World Bank, Government	Government	Overseas Institutional	Overseas Institutional
Seed/early-stage ($ m)	5	15	657	250
Number of Transactions	10	20	273	58
Development ($ m)	25	110	2168.1	3107
Number of Transactions	20	45	273	288
Growth/maturity ($ m)	-	-	21.9	1882
Number of Transactions	-	-	2	100
Total Number of Transactions	30	65	548	446
Average Investment ($ m)	1	2	5.20	11.75

Sources: TSJ Media, IVCA Publications (various years)

Phase II (1995-97), Phase III (1998-2001) and Phase IV (2002-2005) - These three stages are characterized by entry of foreign venture capital and Indian Venture Capital Association (IVCA).

- The achievements of Indian entrepreneurs in Silicon Valley impelled India as a source of talent and entrepreneurship.
- US VC firms looking out for diversifying into new regions began to consider India as potential destination for VC investment. Attempts started in 1993 when Vinod Khosla attempted to develop investment opportunities in India
- IVCA was formed in the year 1993 with members as TDICI, GVCL, IDBI venture capital, RCTC, APIDC venture capital, Canbank ventures, Credit Capital Corporation, Indus ventures, India investment fund promoted by Grindlays and 3i Corporation.
- In 1995 Draper international fund started its operation headed by Kiran Nandkarni. This was followed by Walden-Nikko India Venture Company.
- IVCA lobbied with government to address the problems faced by VC. The prime concern of VC was the absence of tax pass through as was common internationally. IVCA was unsuccessful in influencing government on tax pass through. Small Indian VC industry was unable to put forward the benefits of venture capital in economic development to the Government as;

    i) TDICI, the largest VC already enjoyed the benefits of tax pass-through its joint venture with UTI and was not much concerned with the absence of tax pass through.
    ii) VC firms registered in Mauritius were able to escape the tax net.

- In 1996, SEBI came out with guidelines for foreign venture capital funds to carry out their activities in India. This move liberated the VC industry from a number of bureaucratic hassles and foreign VC started operating in India.
- Table given below highlights the strict regulations on funds for Venture Capital industry.

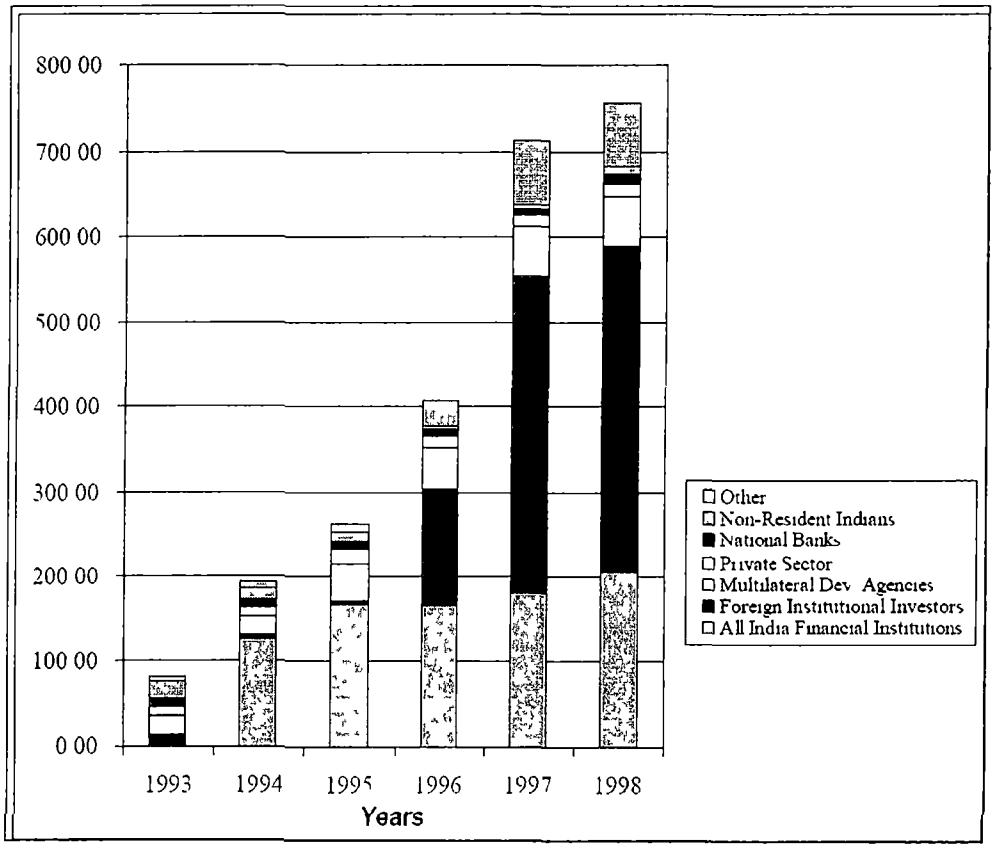
Table 1-6 Disposition of Indian Capital Resources and Their Availability for Venture Investing from 1996–97

Type of Funds	Billions of Rupees	Percent of Total	Percent Permitted for Venture Capital Investment
Currency and bank deposits	634 90	50 1	Up to 5 percent of new funds, since April 1999
Government securities	116 36	9.2	None
Life insurance funds	156 36	12.3	None
Pension funds	262 48	20.7	None
Privately held Shares and Debentures(including mutual funds)	96 34	7.6	Some
TOTAL	1266 44	100	N/A

Source: Statistical Outline of India, 1998-99

- By 1998 IVCA had 21 members with a pool of Rs 25.6 billion and 10 invested in 691 companies.

Figure 1-9 Capital under Management by the Indian Venture Capital Industry by year-wise in U.S. $ Millions



Source: Indian Venture Capital Association, various years.

- For the **Year 2002** India was the second most active VC market in the Asian region, outside of Japan. Indian VC funds received $241M in new commitments, up 11.7% from 2001. 76 deals received investment and there were 41 exits that included Spectramind, Customer Asset, Exl and iFlex .The digital signature regime implemented in April 2002 offered a big boost to the e-commerce sectors especially e-banking and online trading. Impediment to VC growth included over regulation. SEBI, CBDT and RBI regulated domestic venture capitalists. While foreign VC had to cope with two additional bodies MOF and FIPB.
- Indian VC funds received approximately $360M in new commitments in the **Year 2003.** Increased M&A and attractive IPO market led to big exits that included UTI Bank, TV Today, Indraprastha Gas, Worldzen and Vision Source Majority of the investments were in Late Stage transactions with bank and media as hot sectors. The average deal size was much larger though the number of deals decreased to 42.
- Business Process Outsourcing (BPO) attracted the maximum number of investments in 2004 with 9 companies, rising about $148M in the **year 2004** -. However, investments in the sector declined both in terms of number of deals and the amount invested compared to 2003. VCs changed direction in 2004 from the usual focus on export-led sectors to companies that could benefit from the booming domestic economy. VCs and private firms have had dream run in 2004, with a number of them exiting their multi-year old investments. In total, firms exited from 30 investments and took out more than $700M compared to 12 in 2003. Majority of them (24) were in the way of M&A and the rest 6 were through IPOs.
- By the **Year 2005, lots** of bigger funds that were traditionally late-stage investors started to move into India. Several sector-specific funds, led by retail and real estate focused investments, are setting up operations. There was an emergence of a clear stratification within the industry, on who specializes in what, in terms of stage and size of financing.
- The tables given below present a statistical snapshot of Venture Capital in India

Table 1-7 Venture Capital, Amount invested in India

Year	Rupees (in Crores)
1996-97	70
1997-98	320
1998-99	1,052
1999-2000	2,160
2000-01	5,470
2001-02	5,200

Source: IVCA, 2006

Table 1-8 Venture Capital: Financing by Industry as of 2001

Financing By Industry	Rs million	Number
Industrial products, machinery	2,599.32	208
Computer Software	1,832	87
Consumer Related	1,412.74	58
Medical	623.8	44
Food, food processing	500.06	50
Other electronics	436.54	41
Tel & Data Communications	385.09	16
Biotechnology	376.46	30
Energy related	249.56	19
Computer Hardware	203.36	25
Miscellaneous	1,380.85	113
Total	10,000.46	691

Source: IVCA, 2006

Table 1-9 Venture Capital- Methods of Financing as of 2001

Instrument	Rs (million)	Percentage
Equity shares	6318.12	63.18
Redeemable preference shares	2154.46	21.54
Non-convertible debt	873.01	8.73
Convertible instruments	580.02	5.80
Other instruments	75.85	0.75
Total	10,000.46	100

Source: IVCA, 2006

Table 1-10 Venture Capital, Analysis of Investments in 2002 and 2003

Deal Stage	No. Of Companies	Sum Invested	Average per deal
Startup/Seed	7	27.98	3.11
Early Stage	9	52.8	5.28
Expansion	44	345.82	7.36
Later Stage	2	4.56	2.28
Other/Unknown	15	159.05	10.6
Total 2002	**77**	**590.21**	**7.03**
Total 2003	**42**	**774.01**	**18.43**

Note: Amount in $ mn

Source: IVCA, 2006

Table 1-11 Venture Capital: Contributors of Funds as of 2001

Contributors of Funds Contributors	Rs mn	Percentage
Foreign Institutional Investors	13,426.47	52.46
All India Financial Institutions	6,252.90	24.43
Multilateral Development Agencies	2,133.64	8.34
Other Banks	1,541.00	6.02
Foreign Investors	570	2.23
Private Sector	412.53	1.61
Public Sector	324.44	1.27
Nationalized Banks	278.67	1.09%
Non Resident Indians	235.5	0.92%
State Financial Institutions	215	0.84%
Other Public	115.52	0.45%
Insurance Companies	85	0.33%
Mutual Funds	4.5	0.02%
Total	25,595.17	100.00%

(Source: NASSCOM, 2005)

1.7.2 Regulatory Framework- The present venture capital rules in India represent a serious effort to bring the operating environment for venture capital close to global

1.7.2 Regulatory Framework- The present venture capital rules in India represent a serious effort to bring the operating environment for venture capital close to global best practice. When they were initially drafted, the intent was to approximate key features of the US model, notably tax pass-through. Some restrictions, such as on the percentage of listed investments, were needed in order to prevent such funds behaving like hedge funds. Other restrictions, such as the share of a single investment in the total fund, were intended to protect passive investors.

With time, the venture capital industry has matured. However, the policy and regulatory structure have not kept pace. Despite a generally pro-investor policy framework there exist problems in policies as well as in the regulations.

1. First, by requiring certain kinds of institutions to be established, such as a trust and asset Management Company, and specifying capitalization floors, policy tacitly favors institutional investment versus individual investment. While this approach is suitable for passive (portfolio) investment, it is not suitable for investment in innovative startups. Such firms require small, staged investments that might accumulate to less than a million dollars in the first two years along with active, operational involvement by the investor. This is typically the domain of angels and small venture capital funds, which are deterred by the regulatory requirement.
2. Second, while the policy infrastructure is designed to mimic a globally acceptable set of standards, it is not yet simple enough. For example, while tax pass-through has been accepted as a policy goal for institutions that manage money on behalf of passive investors, its implementation through SEBI regulations includes portfolio restrictions that deter investor. Current policy on risk capital provision is embroiled in regulations promulgated by the Securities and Exchange Board of India (SEBI), which regulates venture capital by both domestic venture capital funds (DVCF) and foreign venture capital investors (FVCIs). SEBI-registration offers benefits subject to certain restrictions.

1.7.3 Present status of Venture Capital Industry in India

Level of investments- According to Indian Venture Capital Association (IVCA), India was ranked as the third most active venture capital market in the Asia Pacific region (excluding Japan). Venture Capital firms invested US$543mn across 98 deals in India during 2007; the amount invested during 2007 was slightly higher compared to 2006, which had witnessed 94 deals totaling $500 million. (Venture Intelligence, 2007)

Guidelines for VCF- the bureaucratic obstacles to the free operation of venture capital have remained significant. The main statutes governing venture capital in India included the SEBI's 1996 Venture Capital Regulations, the 1995 Guidelines for Overseas Venture Capital Investments issued by the Department of Economic Affairs in the Ministry of Finance, and the Central Board of Direct Taxes' (CBDT) 1995 Guidelines for Venture Capital Companies (later modified in 1999). Three government bodies regulate domestic venture capitalists; the Securities and Exchange Board of India (SEBI), the Ministry of Finance, and the CBDT. For foreign venture capital firms there are even greater regulation in the form of the Foreign Investment Promotion Board (FIPB), which approves every investment, and the Reserve Bank of India (RBI), which approves disinvestments.

Preferred state of investment- early stage investments accounted for about 66% of all investments during the year; the resurgence in seed and first round investments has been a key highlight of 2007. Over 50% of the VC investments during 2007 were below $5 million including 23% below the US$2mn threshold.

Sector wise investments- With 65 investments worth about $377 million, the Information Technology and IT-Enabled Services (IT & ITES) industry retained its status as the favorite among VC investors during 2007. Within IT & ITES, Online Services companies were the favorite sector accounting for 31% of the investments, followed by BPO, IT Products and Mobile companies. Healthcare & Life Sciences and the Media & Entertainment industry followed IT & ITES industry.

Most active Venture Capitalist-Sequoia Capital India retained its status as the most active VC investor in India with nine investments during 2007. Sequoia ventured beyond IT & ITES to invest across a range of sectors including Clinical Research Outsourcing, Microfinance, Media and Printing Services. Helion Ventures and Erasmic Ventures were the next most active investors during 2007 participating in eight investments during the year. Five of Helion's investments during the year went into outsourcing companies providing either IT or BPO services. Erasmic invested across both tech and non-tech sectors including in retail/consumer services companies. IDG Ventures India followed next with six investments. Four of early-stage focused IDG Ventures' investments were in the IT Products / Enterprise Software.

1.8 Nature of venture capital investments

1. Venture capitalists (VCs) invest in privately held entrepreneurial companies. They are actively involved in the monitoring and management of these companies (Gompers & Lerner, 1999; Gorman & Sahlman, 1989; Sahlman, 1990).
2. They typically own a substantial fraction of the companies, usually in the form of convertible securities (Casamatta, 2003; Cornelli & Yosha 2003; Hellmann 1998;Kaplan & Stromberg, 2003).
3. They are commonly represented on the boards of directors (Lerner, 1995).
4. Venture capital firms raise money from individuals and institutions to invest in businesses that have a potential for yielding high returns on high-risk investments (Shalman, 1990).
5. Venture capital funds usually have limited lifetimes that are determined when the fund is formed, typically ten years, which can be shortened or lengthened by three-year increments. (Shalman, 1990; Gompers & Lerner, 1999).
6. The dominant legal structure for venture funds internationally is the limited partnership, with the VC acting as the general partner, while the investors are limited partners who have little influence on the management of the funds. VCs usually charge a two percent annual management fee, and retain 20 percent of the profits they make on their portfolio investments (Gompers & Lerner. 1999).

1.9 The Types of Venture Capital Firm

As a modern and flexible way of financing young, innovative and fast-growing small and medium-sized companies, venture capital has been developed in several forms in order to serve best the specific financial requirements of companies in different development stages (Moles & Terry, 1999).

Business angels are private investors who invest only in one or two different companies and who provide considerable managerial support, also in the day-to-day-business. They primarily concentrate on the very first development stages of a company (Lerner, 1998). Incubators are an institutionalized form of business angels, which – in addition to money and managerial support – also provide the necessary infrastructure for the development of a company (i.e. rooms, EDP-devices, administration and accounting tasks, etc.). Many incubators accommodate the young companies in their own premises until they have grown to a size, which enables them to survive alone. When capital is provided by established and large companies looking for technology-oriented young enterprises, this is called corporate venture capital. In comparison to investors who pursue only financial objectives corporate venture capitalists also pursue strategic objectives.

Venture capital in the narrower sense of the meaning concentrates on growth finance in the early stages of young enterprises which have already grown to some extent and which can already show the first sales and market acceptance. Private equity concentrates on financing the internationalization or consolidation process in the later stages of established companies, which do not require special management assistance in the day-to-day-business. Public equity in contrast simply is a collective name for all equity owned by shareholders of companies listed on a stock exchange.

In many European countries, VCF are classified as per the following three types:

First- type of venture capital firms is Captive Venture Capital Firms (CVCFs) they are specialist venture capital firms that are subsidiaries, or divisions, of a larger financial institution, and receive their capital from the parent firms (Abeer, 2004). **Second** type of venture capital firms is Independent Venture Capital Firms (IVCFs). They raise their capital for investment from a variety of external sources. These sources includ private investors and some financial institutions like pension and insurance companies, academic

institutions and government agencies. Their general aim is to liquidate the independent firm after a specified date, usually some 7-10 years later. A common feature of independent firms is that no one investor or shareholder has a dominant position in the firm's ownership. The **third-** type of venture capital firm is the Semi-Captive. This type often arises where a subsidiary, or a division of a bank or other investment management group, has established its own in-house fund and at some stage invites a number of investors to join the fund. This type of venture capital firm often starts as a captive firm and then raises money from sources other than the parent company (Lorenz, 1989; Abbot and Hay, 1995; Wright and Robbie, 1998).

1.9 Conclusions

Venture capital emerged as a source of finance in USA after the II world war and has subsequently been used in different parts of the world. In an increasingly knowledge intensive world, the prospects of future growth of any economy depends to a large extent on how fast technical innovations can be commercialized. Such new and untried ideas have a high level of uncertainty and thus are not able avail funds from the traditional financial sources. Venture capital funds, which typically invest in new and untried ideas presents a unique solution to the problems, faced in financing of such risky and potentially high reward projects.

Chapter 2

The State of Uttar Pradesh

2.1 Introduction

Located in the northern part of India. It is bounded by the state of Uttaranchal in the north-west, the state of Haryana and the union territory of Delhi in the west, the state of Rajasthan in the south-west, the state of Madhya Pradesh in the south, the state of Bihar in the east, and Nepal and Tibet on the northern side. The capital of Uttar Pradesh is Lucknow. Uttar Pradesh is a large state; it is divided into 4 regions, having 17 circles and 70 districts, which are as follows:

Table 2.1 Region, Circles and Districts of Uttar Pradesh

Region	Circles	Districts
Bundelkhand	Chitrakoot	Banda,Chitrakoot,Hamirpur,Mahoba
	Jhansi	Jalaun, Jhansi,Lalitpur
Central Region	Kanpur	Auraiya,Etawah,Farrukhabad,Kannauj,Kanpur Dehat,Kanpur Nagar
	Lucknow	Hardoi,Kheri,Lucknow,Raebareili,Sitapur, Unnao
Eastern Region	Allahabad	Allahabad, Fatehpur,Kaushambi,Pratpgarh
	Azamgarh	Azamgarh, Ballia, Mau
	Basti	Basti, Sant Kabir Nagar
	Devipatam	Balrampur ,Bahraich, Gonada
	Faizabad	Ambedkar Nagar, Barabanki,Faizabad, Sultanpur
	Gorakhpur	Deoria, Gorakhpur, Kushinagar,,Maharajganj
	Varanasi	Chandauli, Ghazipur,Jaunpur,Varanasi
	Vindhyachal	Mirzapur,Sant Ravidas Bhadohi,Sonbhadra,Shravasti,Siddhartnagar
Western Region	Agra	Agra, Aligarh,Etah,Firozabad,Hathras,Mainpuri,Mathura
	Bareilly	Bareilly,Baduan,Pilibhit,Shahjanpur
	Meerut	Baghpat,Bulandsahr,Gautam Budh Nagar,Ghaziabad, Meerut
	Murardabad	Bijnor,Jyotiba Phulenagar, Moradabad, Rampur
	Saharanpur	Muzzafarnagar,Saharanpur

2.2 Snapshot of Uttar Pradesh

If Uttar Pradesh were a country, it would be the world's seventh largest.. Uttar Pradesh is the most populous state in India and it has one-sixth of India's population.Uttar Pradesh has a large agricultural base, fairly well spread industrial activities, and some of the best learning centers in India.Majority of the state population depends upon farming activities. Western Uttar Pradesh is more advanced in terms of agriculture as compared to the other regions in the state. Wheat, rice, pulses, oil seeds and potatoes are the major agricultural products. Sugarcane is the most important cash crop throughout the state. Uttar Pradesh is one of the most important state in India so far as horticulture is concerned. Apples and mangoes are also produced in the state. Agri and food processing, chemicals, leather, textiles, electronics, software, engineering, tourism and mineral-based industries are the key industries, whereas banking, communications, IT and Biotechnology are the emerging sectors.

Table 2-2 Facts file of Uttar Pradesh

Geographical Area, (lakh sq. km)	2.41
Capital	Lucknow
Population (2001 Census) In lakhs	1661.98
Gross state Domestic product at current prices in 2004-2005 (as of Feb 2006), (Rs. Crore)	235678
Gross state Domestic product at constant price (1993-94) in 2004-2005 (Rs. Crore)	127560
Net State Domestic Product at Current Prices (2004-05), (Rs. Crore)	205249
Net State Domestic Product at Constant Prices (1993-1994) for (2004-05), (Rs. Crore)	109768
Per Capita Income at current prices (2004-2005), Rs.	11477
Literacy rate (percentage)	56.27
Percentage of State Population to All India Population	16.16
Principal languages	Hindi and Urdu

Source: CSO Estimates, Economic Survey of Uttar Pradesh, 2005-2006

2.3 Economic condition of Uttar Pradesh

Though relatively large in terms of population and geographical reach Uttar Pradesh lags behind other Indian states when compared on basis of its economy. The present value added to the states manufacturing sector is $4 billion (Rs.170 billion at 1996-97 price), which is around 40% of progressive Indian states such as Maharashtra. The dismal economic performance of Uttar Pradesh can gauged from the following observations

- The average fixed capital per worker in Uttar Pradesh was 8.8 lakhs as against Rs 6.6 lakhs per worker nation wide.
- Almost 11 percent factories have closed in Uttar Pradesh as compared to 3 percent at all India level.
- Annualized growth rate of real gross state domestic product at current price (in percent) shows that Uttar Pradesh has remained stagnant and thus fallen far behind the national average. As can be seen from table 2-3, the GDP growth rate of Uttar Pradesh lags the national average.

Table 2-3 GDP growth rate of selected Indian states including Uttar Pradesh (in percentage)

State-wise growth rate in percentage	1993-94 to 1999-00	2000-01 to 2005-06
Uttar Pradesh	4.58	4.58
Bihar	3.93	4.55
Haryana	5.74	6.93
M.P.	6.16	5.33
Uttaranchal	3.01	7.66
All India average	**6.60**	**6.75**

Source: Uttar Pradesh Government Statistics, 2007

- The economic backwardness of Uttar Pradesh affects the per capita income. As can be seen from the table 2.4 the difference between Uttar Pradesh and average of other Indian states has increased. This indicates that not only does Uttar Pradesh lag the national average but also this lag increased further with the passage of time.

Table 2-4 Average per capita incomes of selected states (including Uttar Pradesh, in Rs.)

State	1993-94 to 1999-2000	2000-01 to 2005-06
Uttar Pradesh	9162	12145
Bihar	5157	6776
Haryana	23214	35717
M.P.	10777	15555
Uttaranchal	12863	19331
All India average	**16555**	**25885**

Central Statistical Organization, 2005

- Annualized growth rate of per capita income (2000-01 to 2005-06) of Uttar Pradesh lags behind the all India figures. As shown in the table below, the difference in the per capita income of Uttar Pradesh and the rest of India is increasing this is due the slower growth in per capita income for Uttar Pradesh.

Table 2-5 Average per capita income growth rates of selected states (including Uttar Pradesh, in percentage)

State	Constant price	Current price
Uttar Pradesh	2.43	6.18
Bihar	2.70	6.13
Haryana	5.14	9.17
M.P.	3.14	7.70
Uttaranchal	5.35	8.90
All India average	**5.35**	**9.14**

Central Statistical Organization, 2005

- As can be seen from table 2.6 given below, the per capita gross capital formation of Uttar Pradesh is almost half of all in India average. This indicates that a lesser amount of new investments are being done in the state of Uttar Pradesh, which in future will lead to a slower growth rate of Uttar Pradesh's economy.

Table 2- 6 Per capita gross capital formations for selected states (including Uttar Pradesh)

State	Year 2001 (In Rs).
Uttar Pradesh	2141
Bihar	1086
Haryana	6202
M.P.	2606
Uttaranchal	2141
All India average	**4476**

Source: Central Statistical Organization, 2005

As discussed above Uttar Pradesh lags behind the national averages in most of the economic indicators and this lag is increasing which may drive the state into further economic backwardness.

- In the banking sector the share of deposit from Uttar Pradesh is next to Maharastra but the credit dispersal is less than most of the other states. The table below depicts the position of Uttar Pradesh with respect to other Indian states.

Table 2.7 Credit Deposit ratios for selected states including Uttar Pradesh

State	Credit-deposit Ratio (in percentage)
Tamil Nadu	113.4
Maharashtra	94.7
Chandigarh	94
Andhra Pradesh	91.6
Rajasthan	82
Karnataka	78
All India	**74.2**
Gujarat	65.2
West Bengal	61.4
Jammu & Kashmir	48.1
Uttar Pradesh	44.9

RBI Data, 2008

According to RBI (as on 31 march 2008) Uttar Pradesh is ranked low at the 22 positions among the Indian sates in terms of the credit deposit ratio. A low credit deposit ratio indicates that in Uttar Pradesh either the banks are unwilling to lend funds or entrepreneurs are not able to present banks with good projects.

- State finance of Uttar Pradesh is in a weak position. The quality and content of fiscal deficit has worsened considerably. Liabilities relative to the GSDP are accumulating. The accumulated liabilities have resulted in a vicious cycle, where fiscal imbalance and higher debt accumulation leads to higher fiscal imbalances. The ratio of revenue deficit to fiscal deficit is showing a rising trend. It has increased from 40 percent in 1990-91 to more than 53 percent in 2004-05 (BE).

Budget of Uttar Pradesh 2007-2008

Item	Actual figures 2005-06	Budget estimates 2006-07	Revised estimates 2006-07	Budget estimates 2007-08
1	2	3	4	5
Opening Balance	-97.55	-503.17	* 3234.25	* 5481.47
1- Consolidated fund				
(1) Receipts –				
(a) Revenue receipts	45349.16	56144.40	60030.17	74017.70
(b) Capital receipts				
(i) Loan receipts	17338.60	= 24008.14	12397.71	= 25083.60
(ii) Recovery of loans and advances	585.05	387.93	387.93	607.99
Total. (b) Capital accounts receipts	17923.65	24396.07	12785.64	25691.59
Total. receipts	63272.81	80540.47	72815.81	99709.29
(2) Expenditure –				
(a) Revenue expenditure	46617.14	55021.23	56671.18	67871.38
(b) Capital expenditure				
(i) Capital outlay	8711.23	13437.21	14093.26	18429.67
(ii) Repayment of loans	8333.49	= 13606.12	3606.12	= 13801.02
(iii) Loans and advances	683.84	785.40	743.40	809.34
Total. (b) capital expenditure	17728.56	27828.73	18442.78	33040.03
Total. expenditure	64345.70	82849.96	75113.96	100911.41
Deficit (-)/surplus (+) of Consolidated Fund	-1072.89	-2309.49	-2298.15	-1202.12
2-Contigency Fund (Net)	115.75	0.00	23.49	0.00
3- Public Accounts (Net)	1205.24	2448.70	1465.76	1823.08
Net Results of All Transactions	248.10	139.21	-808.90	620.96
Closing Balance	150.55	-363.96	2425.35	6102.43

(In crore rupees), As per RBI figures, # This includes Rs. 10,000 crores given by RBI in shape of advance for economic measures in the budget estimates for the year 2006-2007 and budget estimates for the year 2007-2008.

The government of Uttar Pradesh has enacted a fiscal responsibility and budget management act (FRBMA) in 2004 with an aim to control the growth in debt and eliminate revenue deficit. A 15- fold strategy of fiscal reforms was undertaken to for achieving the targets set out by the FRBMA. This strategy is yet to bear fruit and as can be seen from the budget summary given below Uttar Pradesh continues to face deficits.

2.4 Infrastructure of Uttar Pradesh

Infrastructure plays a key role in promoting the development of a state. UP's infrastructure can be summarized under the following heads

2.4.1 Physical Infrastructure

Roads -The budget for roads has been increased five times from Rs. 1,083 crores in 2003 to Rs. 5583 crores in 2006. The state plans to bring up the State Highway Authority (SHA) on the lines of the National Highway Authority of India.

Road sector: Vision 2021

- Length of state highways to be increased to 12174 km
- Length of district roads being increased to 24,348 km
- 100 per cent connectivity is being ensured for villages.
- Widening of all state highways to double- lane
- Widening of 40 per cent major district roads to double lane

Rail- The capital of UP, Lucknow is an important junction of the Northern and North Eastern Railways. Other cities of UP are also well connected with all important cities of India.

Aviation- Lucknow, the capital of Uttar Pradesh, is well connected by air with New Delhi, Patna, Calcutta and Mumbai.

Power-The total estimated investment requirement during FY 2000-FY 2009 in the state is:

- Generation -Rs. 37 billion
- Transmission -Rs. 37 billion
- Distribution -Rs. 112 billion

The state is on the path of constant progress in with respect to the power sector. This is evident from the fact that 7503 villages were electrified during 2005-06 and the state aims to electrify all villages by 2008. Further, many major private projects like Dadri Power Project of Reliance Energy Generation Limited, Roza Power Project of Birla Group are in various stages of implementation in the state. To boost the investments in this sector, government land is being made available on lease for a period of 99 years at the rate of Rs. 100 per acre to set up a power generation project. Also, the state has formulated an explicit power policy to facilitate investments in the power sector.

2.4.2 Social Infrastructure

Education

Uttar Pradesh was ranked as first for the successful implementation of education for all policy. The state launched it's mid -day meal program in 95,000 primary schools and about 1.75 crores of children benefited under this scheme. The state has provided financial aid of Rs. 20,000 for higher education of girls under Kanya Vidyadan scheme. Further, provision has been made for free distribution of books and uniforms for students in primary schools.14, 412 new school buildings have been constructed in the state during 2004-05.

Prominent Educational institutions in the state of Uttar Pradesh

Apart from having a number of universities and institutes in different regions of the state, UP has a number of prominent world class learning institutions like

- Indian Institute of Technology (IIT)
- Indian Institute of Information Technology (IIIT)
- Indian Institute of Management (IIM)

2.4.3 Natural Wealth of Uttar Pradesh

Uttar Pradesh is endowed with natural wealth in abundance. This wealth lies hidden below a variety of rocks of different ages found in lofty mountain ranges of the Himalayas in the North and Vindhyan ranges in the South. The diversity of flora and fauna displayed here due to vast area, big and small rivers, varieties of climatic conditions, and different kinds of soil are hard to find elsewhere.

Minerals

The minerals found in Uttar Pradesh include limestone which is found in Guruma-Kanach- Bapuhari in Mirzapur district and Kajrahat in Sonebhadra district; dolomite which is found in Mirzapur, Sonebhadra and Banda, glass-sand found in Karchhana tehsil of Allahabad district, Karwi in Banda district and Mau district; marble found in Mirzapur and Sonebhadra; bauxite found in Rajhgewan in Banda district; non-plastic fireclay found in Bansi, Makri-Khoh area of Mirzapur district; and Uranium found in Lalitpur district. Besides, Barytes and Edalusite are found in the districts of Mirzapur and Sonebhadra. Sand-stone, pebbles, salt punter, marang, sand and other minor minerals are also found in the State.

2.5 Developmental institution of Uttar Pradesh

2.5.1 Industrial Development

(UPSIDCL), Uttar Pradesh State Industrial Development Corporation, the premier industrial promotion and infrastructure development undertaking of the State Government has been the driving force behind scores of industrial ventures since 1961. Uttar Pradesh State Industrial Development Corporation Limited (UPSIDC) is committed to provide high standard, plentiful infrastructure, facilities, and an investor friendly environment its major promotional and development activities are:

- Development of Industrial Areas equipped with the entire necessary industrial infrastructure.
- Identification and promotion of infrastructure-related and industry specific projects.
- Execution of civil construction works for government and public sector organizations.
- Acquisition of land on demand for large projects.
- Development of integrated Infrastructure Industrial Townships.

Its industrial areas are equipped with infrastructure facilities like roads, drains, internal power lines and streetlights. It makes efforts to provide state-of-the-art and need-based support facilities like industrial housing, telecom, water supply, common facility centers,

banks, post offices, dispensary, police outpost, shops, Business Development Centers for housing with modern communication, business centers and field hostels.

UPSIDC has so far developed 155 Industrial Areas encompassing 41,948 acres of land with a wide range of infrastructure facilities. UPSIDC has housed more than 7800 units in various industrial areas which have provided direct employment to 2, 00,000 persons.

Prestigious Industries such as Asian paints, Arihant Industries, Avon Cycles, Atma Steel, Ambuja Agro, Bindal Agro, Bhushan Steel, BHEL, BEL, CEL, DCM-DAEWOO, Dalmia, Delhi Press, Escorts, Glaxo, Goodlass Nerolac, Hawkins, Hindustan Lever, Hindustan Petroleum, Indo-Gulf Fertilisers, JP Industries, Jain Tube, LML, Nirma, Nicco Batteries, Paam Pharma, Pepsi, Parle, Raunaq, Raymonds, Rathi Steels, Swadeshi Polytex, SRF, Nippon Denso, Shamken Multifab, Super House, Somaiya Organics, Telco, Tata Fertiliser, Vam and Williard India are in the industrial areas of UPSIDC

1.5.2 Financial Institutions

1. Pradeshiya Industrial & Investment Corporation of Uttar Pradesh Limited (PICUP)- The main function is to facilitate industrial investment in Uttar Pradesh. PICUP provides broad based financial services of the highest quality right from Project Identification to preparation of Feasibility Report and from extending Term Loans to Equity Participation.

Over 1600 companies which have been supported in a short span of thirty three years generating direct capital investment of over Rs. 5200 Crores and primary direct employment to approximately over 1, 50,000 persons.

2. Uttar Pradesh Financial Corporation (UPFC) –Apart from PICUP financial assistance to industrial & service sector units is also provided by UPFC. Focus of UPFC is on small and medium enterprises by providing assistance in establishing new units and expansion of already existing units.

Apart from the above state specific financial institutions Uttar Pradesh has a number of other financial institutions and public and private banks.

2.6 Research institutes in Uttar Pradesh

1. Central Drug Research Institute (CDRI), Lucknow

A pioneer organization engaged in bio medical research. Its achievements are the development of new drugs and diagnostic vaccines. CDRI also carries out extensive research to find cheaper and convenient technology for manufacturing drugs and intermediaries.

2. Central Institute of Medicinal & Aromatic Plants (CIMAP), Lucknow

It is dedicated to aromatic and medicinal plant research, cultivation and business. Its excellence can be understood by its mission of being the ultimate in green technologies for health and life.

3. National Botanical Research Institute (NBRI), Lucknow

It is the R&D Centre of CSIR , undertaking research from classical taxonomy to cutting edge areas of modern biology-including both applied and basic research in the fields of biochemistry, bioinformatics, biotechnology, conservation biology, cytogenetics, environmental sciences, ethnopharmacology, floriculture, microbiology, molecular biology and genetic engineering, pharmacognosy, pharmacy, physiology, phytochemistry, plant biodiversity, plant breeding, taxonomy and tree biology, for the conservation and sustainable utilization of the non crop plant genetic resources of the country.

2.7 Industrial parks in Uttar Pradesh

1. Biotech Park, Lucknow

The State of Uttar Pradesh, a vital hub of scientific activities is endowed with rich biological resources and rich biodiversity. It has the unique distinction of having a number of research institutions, which have the expertise and capabilities in the area of biotechnology. In recognition of which, Lucknow was declared as the Biotechnology City of India during the 89th session of the Indian Science Congress on January 3, 2002.

Biotechnology, a frontier of science offers enormous possibilities of its use as a premium precision tool for the welfare of society and creation of wealth for sustainable

commercial and socio-economic development. The establishment of the Biotechnology City at Lucknow signifies a new era of partnership among educational and R&D institutions and industry, and serves as starting point for various innovative industrial activities.

Biotech Park focuses on the following areas:

Health Care: Human and animal health care products including therapeutic aids, immuno-diagnostics, biosensors, vaccines, gene therapy, monoclonal antibodies, neutraceuticals and cosmetics.

Agriculture: Improvement in the quality and yield of crops, horticulture and forest tree species, biopesticides and biofertilizers, processed food and quality enhancers,

Environment: Bioremediation, safe disposal of waste.

Industrial Application: Plants as bioreactors, enzymes, chemicals and polymers.

Energy: Bio fuels, renewable energy sources have been identified as thrust areas.

2. Software Technology Park

STPI and the Government of Uttar Pradesh have jointly taken a lead in spreading the IT revolution across the state with the setting up of STPI centers in Noida, Lucknow, Kanpur and Allahabad .The aim to provide a favorable environment and world class infrastructure to the IT industry.

In order to capitalize on the vast employment generating potential of the IT services industry, the State Government actively promotes the establishment of units for providing IT- Services (hardware/software based) and IT-enabled Services (Call Center, Medical Transcription and BPO). These units have vast employment generation potential. The technical know-how, Infrastructure, marketing support and financial assistance will be provided by the State Government to all organizations for setting them up. Lucknow - Kanpur corridor shall be developed as an ideal IT and ITES destination with leverage of IIT(Kanpur), IIM(Lucknow) and IIIT(Allahabad) as technical and manpower centers of excellence.

The industrial and service sector policy of UP government for the infrastructure sector is based on the following pillars:

- Creation of world-class infrastructure through private participation.
- Up-gradation/ maintenance of industrial areas by a co-operative society of the entrepreneurs.
- Creation of Industrial Infrastructure Development Fund (IIDF) for financing initiatives in infrastructure development.
- Promotion of captive and co-generation of power
- Promotion of natural gas as an alternative source of energy.

2.8 Industrial and Service Sector Investment policy of Uttar Pradesh

Industrial and service sector investment policy (2004) aims at creating comprehensive reforms and restructuring of the state economy by creating new opportunities and opening new avenues for investment in the state.

The policy provides special incentives on infrastructure investment, in addition to the exemption from various tax and duties to the investors. The policy maintains a single window policy for speedy and hassle free procedures. A 100 per cent exemption on stamp duties for IT, ITES, food processing sector and service sector; rebate on stamp duty, land on priority, interest free loan under industrial investment promotion scheme, uninterrupted power supply and exemption from electricity duty, 50-100 per cent exemption from stamp duty on purchase of land have helped to create ideal environment for investment. Also extra incentives are being given on case-to-case basis for investment more than Rs.500 crores.

1. Information Technology Policy 2004

The policy aims to achieve economic growth through development of nationally and globally competitive IT industry by facilitation and providing confidence, dedication, purpose and a fertile ground in which investments would thrive.

Objectives of the Policy

- Bringing IT to masses
- Accelerate the use of information technology in schools, colleges and educational institutions

- Spurring the Domestic demand for software, hardware and services
- Making Software, Electronics/IT Hardware and ITS/ITES Sectors globally competitive and thereby increasing export earnings
- Facilitating the industry for addressing global markets
- Facilitate formation of value additions for growth of the industry
- Help businesses realise full potential in creating wealth.

2. Biotech Policy 2004

The state of Uttar Pradesh aspires to utilize the modern tools of biotechnology and attain prosperity for farmers, generate employment in rural areas, food for all, good health and clean environment. The mission of the policy is to develop knowledge-based economy, assure benefit of biotechnology to all section of the State and promote entrepreneurship in biotechnology-based industries.

Objectives of the Policy

- Establish pre-eminent position of the State in the field of biotechnology.
- Create awareness about the entrepreneurial and job opportunities in the field of biotechnology.
- Attract biotechnology based industrial investment.
- Develop and conserve bio-resource for sustainable commercial use.
- Harness existing R&D capabilities for industrial/ commercial developments in the State and to promote corporate funding and developing such knowledge.
- Develop adequate institutional and related infrastructure for development, acquisition and dissemination of biotechnology through out the State.
- Promote research and development and to establish centers of excellence in frontier area of biotechnology.

3. Policy for Food Processing Industry (2004-09)

Uttar Pradesh is one of the largest producers of farm commodities in the country and the largest producer of vegetables, wheat, maize, sugarcane, potato and milk. Some of the most delicious varieties of fruits are grown in the state. Thus there is an immense inherent

potential in this sector. The state also has diverse agro climate conditions, which are conducive for a variety of crops round the year.

Despite the inherent potential, it has so far been untapped. Large quantities of vegetables and fruits are wasted as only around 2% of the production is commercially processed. Though considerable success has been achieved in evolving appropriate pre harvest practices, the issue relating to post harvest management, which includes grading, sorting, packaging, processing, transportation and marketing, are still not adequately addressed. It is believed that agriculture in the state can turn into a lucrative venture, if there is a proper linkage among various components of agri-business, i.e. from the stage of sowing to final sale and consumption, which can develop synergy and dynamic efficiency in the system.

Objectives of the Policy

The policy aims at achieving the following objectives:

- Better returns to the farmer for his produce
- Encourage investment and employment generation in the sector
- Promote value addition and quality consciousness
- Minimize wastage of agriculture and horticulture produce
- Provision of appropriate linkages between the agricultural and industrial sectors
- Provide a 'market' focus to the entire range of activities involved in food processing.

4. Power Policy 2003-09

Power to all is an integral and primary component of the developmental program of the State. To address this key developmental challenge Government of Uttar Pradesh formulated a Power Policy in 1994 and a Power Reform Policy in 1998 with the following objectives. The power policy has been drafted to attract private sector investment into power generation, transmission and distribution with a view to ensuring electricity supply to all villages in the state.

Objectives of the Policy

- Provide cost efficient good quality electricity to all categories of consumers for economic development and social up-liftment of the state.
- Make the energy sector commercially viable so that it ceases to be burden on the state budget.
- Protect the interest of the consumers

With the above objectives in perspective, the Government of Uttar Pradesh agreed on the following key aspects of the power sector Reform program.

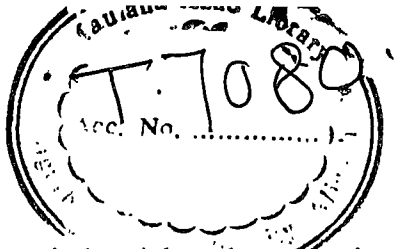
- Restructuring of Uttar Pradesh State Electricity Board (UPSEB) into autonomous and separately accountable entities.
- Creation of an independent Regulatory Body to protect consumers as well as long-term financial health of the power sector.
- Ultimate transfer of ownership of assets to public corporate entities over a phased time scale.
- Rationalization of tariff.

5. Policy for Development of Hi-Tech Townships in Uttar Pradesh

In realization to immense potential of real estate in the state the government of Uttar Pradesh has framed the policy for promoting private sector participation in real estate.

Objectives of the Policy

- Produce competitive hi-tech marketable estates with an attractive environment for high quality living, work and recreation.
- Encourage high technology and knowledge based industries and tourism.
- Provide facilities for business organizations engaged in modern technologies.
- Facilitate and create an enabling environment for attracting maximum private investment in housing and infrastructure development.
- Support and enable private investment in other sectors of the state economy.



6. Special Economic Zone Policy 2006

The government has announced the SEZ policy to foster industrial and economic development and create conducive environment for the development of SEZ.

Salient Features of SEZ acknowledged by the policy:

Integrated areas with world-class infrastructure facilities will be developed through establishment of SEZ.

- Apart from achieving a rapid economic & industrial growth in the country and the state, new avenues for employment generation will be created by setting up of SEZs.
- The establishment of SEZs will boost the exports. Domestic Investments, FDI and foreign & modern technology will be attracted in the SEZs.
- Provisions for the exemption of taxes etc. for rationalization/exemption in the legal provisions related to labour, environment, electricity, etc. has been provided for in the policy.

7. Sugar Policy

The Government of Uttar Pradesh declared the new sugar industry promotion policy in 2004. Under its proposals, entrepreneurs are provided with a host of incentives and concessions to set up sugar mills in the state. These include exemption of entry tax on sugar, reimbursement of administrative charge and trade tax on molasses. Further, exemption from stamp duty and land registration fee, exemption and reimbursement of purchase tax on sugarcane, reimbursement of expenditure on transport of sugarcane and sugar are also provided.

Uttar Pradesh has traditionally been known as the "Sugar Bowl of India" (accounting for 40 per cent of the total production) and sugar is an important source of livelihood in the state. The new policy on sugar provides direct benefits to the farming community as it has generated rural employment, reduced income inequalities and aims to propelled the growth process of the state.

2.9 Incentives to promote industrial and service sector investment

The Government of Uttar Pradesh is committed to providing high standard, plentiful infrastructure facilities, a favorable policy framework and an investor friendly environment for ensuring higher industrial growth in the state. The state recognizes its role in nurturing economic activity and entrepreneurship and places high priority on providing outstanding infrastructure to the industry. In lieu of which government of Uttar Pradesh provides incentives such as:

1. Stamp Duty and Registration Charges on Land -100 percent exemption from payment of stamp duty on will be provide for the following,

- New small-scale units in 31 districts of Uttar Pradesh
- Infrastructure projects.
- IT, BPO and food processing units.
- Service sector projects such as multi facility hospitals with specified facilities and having at least 100 beds.
- Facility of registration of all industrial projects at confessional rate of Rs. 2 per thousand subject to a maximum of US$ 108.485

2. Fiscal Incentives- Service Sector-Incentives shall be provide to certain Service sector projects as follows,

- Exemption from acquisition charges if the Government acquires land for the project.
- Exemption from entry tax on plant and machinery used for the establishment of project.
- Exemption from electricity duty for 10 years from the date of establishment.
- Exemption from development charges levied by the development authority/local authority.
- Exemption from house-tax, water and sewage tax and all other taxes/charges levied by the development authority/local authority for five years from the date of establishment.

3. Investment Incentives under the information technology policy (2004)

- **Exemption of Stamp Duty and Registration Fee**: IT units and call centers shall be given 100% exemption from payment of Stamp Duty and Registration fees.
- **Preferential Allotment of Land**: preferential allotment of land for IT industry will be done through NOIDA/Greater NOIDA, UPSIDC/Development Authorities in the state.
- **Uninterrupted Power**: Continuous and uninterrupted power supply for IT industries. Exemption from power cuts without limit.
- **Captive Power Generation**: Encouragement to captive power generation in IT locations. I.T Units with 5 KVA power requirements can be set up anywhere irrespective of master plan or land use classifications.
- **Incentives to Mega Investment Units**: Information Technology and electronic units set up in the state with an investment of Rs50 Crores or more shall be classified as Mega Investment Units. The mega investment units will be entitled to a plethora of incentives including allotment of land on priority basis, interest free loans for a period of 15 years upto the amount of sales/trade tax liability among others.
- **Venture Capital Fund**: venture capital fund will be created with state government/PICUP/ UPSIDC/ UPFC/private enterprises/ SIDBI and others for IT sector.
- **Special Financing Package** will be developed by the State Financial Agencies to fulfill the unique needs of the IT sector.
- A Range of **Trade Tax Concessions** will also be provided to the IT sector.
- **Power Tariff**: IT units in information technology parks and STPs will be charged the same power tariff as the SSI.
- **Exemption** from Pollution Control Provisions.

4. Investment incentives under the biotech policy (2004)

- Single window facility and constitution of biotechnology development board.
- Relaxation of taxes on Biotechnology based products.
- Relaxation on land for establishment of biotechnological units.

- Biotechnological units shall be exempted for entry tax for fifteen years on Capital goods.
- Captive generation sets installed by biotechnological units shall be exempted of electricity tax for 10 years.
- Uninterrupted power supply.
- Relaxation in stamp duty and registration fee.
- Relaxation in zonal regulations.
- Projects where an investment of Rs50 Crores or more will be made either in expansion of existing units or in setting up a new unit, also such units which employ more than 250 people will be declared as mega projects. Such projects will be given relaxation under special package.
- Provision of cluster development fund /venture capital.
- Establishment of Biotech parks at NOIDA and Lucknow.

5. Investment incentives to SEZ developer and units (2006)

- SEZ developer and SEZ units shall be exempt from all kinds of taxes, cess or levies of the Government of Uttar Pradesh or taxes of any other local authority/agency for any transactions within the SEZ or any procurement of goods, supplies or services from the Domestic Tariff Area (DTA). Units in DTA would also be exempt from these on sales made by them to a SEZ unit or SEZ developer. These include UP trade tax, turnover tax, mandi tax, entry tax, development tax, local bodies tax, etc.
- SEZ developer and units would also be exempt from taxes levied by local bodies, as SEZs would be an industrial township under constitution of India and would be responsible for providing services within the zone.
- Developers, Co-developers of SEZs and units established/ to be established will get total exemption from the stamp duty & registration fee on first transaction but on implementation of amendments in the Indian stamp act -1899, as per third schedule of SEZ Act-2005, exemption will be applicable as provided therein.
- Facility for treating sales from SEZ to DTA, as "imports" is not being implemented, because many of the other states are not having any such policy. However, this is subject to revision.

- Electricity duty and taxes shall be exempted on generated or purchased electricity for use in processing area of the SEZ for a period of 10 years from the date of production or start of service.
- SEZ will have freedom of generation, transmission, and distribution of electricity within the SEZ subject to provision of Electricity Act 2003. Wherever the consent of Uttar Pradesh State Regulatory Commission will be required, it shall be obtained.
- All admissible facilities shall be available to SEZ as well under the Uttar Pradesh power policy.

2.10 State of Industrial Development in Uttar Pradesh

Uttar Pradesh's industries are predominantly based on agriculture. Many industries in Uttar Pradesh's are highly export oriented contributing about 6% of India total export in the year 2002-03(CMIE). Also Uttar Pradesh is a leading state in art ware and is supplying products to national and international markets. If one were to lay down the contours of the present industrial economy of Uttar Pradesh the following key observations emerge (As per the Uttar Pradesh Development Report, 2007).

- The states industrial economy is predominantly agro-based with significant strengths in chemical and engineering sector
- Up to 1980s, Uttar Pradesh had significance presence in textile processing and mineral based industrial sectors of India, but this declined in the 1990s
- Uttar Pradesh's presence increased significantly in basic goods, declined in consumer goods and intermediate goods.
- The state's agro-processing strengths lie in refined sugar, vanaspati, sugar and grain milling. In the 1950's per capita income in UP was at par with that of other states, today it stands at only two –thirds of the national average income. In the late 1970's and 1980's large doses of public investment (both central and state) stimulated private sector participation in the state's industrial growth and helped UP to maintain its growth. As a World Bank study indicates, slowdown in UP started subsequently when different Indian states started to compete with each other for investments by formulating exclusive industrial policies based on their

individual needs and strengths. In view of its appalling economic condition various studies have been conducted to find how improvements can be made

Table 2.8 Industrial corridors in Uttar Pradesh

Corridor	Districts
Western	Saharanpur, Muzzaffnagar, Bareilly,Badaun, Bijnor, Meerut, Moradabad, Ghaziabad, Agra, Aligarh,Mathura, Firozabad And Buland Shahr.
Central	Lucknow, Unnao,Kanpur-Nagar, Kanpur-Dehat,Jhansi And Jalaun
Eastern	Allahabad, Mirzapur, Varanasi, Sonbhadra, Maharajganj, Siddhartnagar,Basti,Gorakhpur, Azamgarh, Mau , Ghazipur

As per a report on Uttar Pradesh by planning commission, government of India, titled "Uttar Pradesh Development Report" 2007, the diagnostic analysis of the macroeconomic problems shows that:

1. Industrialization is decisive for growth

Every percentage point increase in the share of the secondary sector contributes to a 0.27 percentage to the future per capita growth while for agriculture and the tertiary sector it is 0.15 and 0.11 only. Even within Uttar Pradesh, it is observed that circles with higher shares in manufacturing output have larger per capita income.

2. Investment climate needs to be enhanced

As per the tenth five year plan (2002-07) Uttar Pradesh will need investments of around Rs.3, 23,161 crores. Centre is likely to contribute Rs.58, 170 crores and state will have to contribute Rs. 27,470 crores towards investment in Uttar Pradesh during the tenth plan period at 2001-02 prices. The balance amount, Rs. 2, 37,521 has to come from private sources, which is an overwhelming task.

3. Inadequate private sector response

As indicated by annual survey of industries (ASI 1991-2002) data, which shows a declining share of Uttar Pradesh as compared to other Indian states. Data of the implemented Industrial Entrepreneurship Memorandum (IEM) shows that states like

Gujarat, West Bengal, Maharashtra and Andhra Pradesh were much-preferred destinations for investment as compared to Uttar Pradesh.

4. Low value added manufacturing

The efficiency of capital in manufacturing in terms of Gross Value Addition (GVA) to Fixed Capital Stock (FCS) ratio in Uttar Pradesh is very poor at 0.34 as compared to all India average of 0.47. This indicates that in order to grow Uttar Pradesh will require more capital than other states.

5. Foreign Direct Investments (FDI)

FDI investment during the last 1991-2002 shows a dismal performance when compared to other Indian states. Only 730 approvals were there in UP, out of a total of 21, 502 approvals on an all India basis. The amount of FDI approvals in percentage was only 1.73 percent.

6. Investment Opportunities in Uttar Pradesh

Uttar Pradesh currently accounts for around 4.2% of the country's investment. Out of Rs. 649.80 Bn of investment in Uttar Praddesh, 31% of the projects are in announcement stage, 25% in proposal stage and only 44% of them are under implementation stage. The projects under implementation relate to Electrical Appliances, Compact Discs, TV receivers, Leather products, Consumer electronics, Software development, Auto ancillaries and food segments besides several infrastructure projects including roads, industrial parks and integrated townships. In Uttar Pradesh the major share of the investment is accounted by Noida/Greater Noida and Ghaziabad region. This belt together is accounting for around 25% share of the total investment in Uttar Pradesh. The major units coming up in this region relate to electronics, software development, footwear, printing services, apparels, ago and food processing industry and other infrastructure projects like hotels, commercial complexes, industrial parks, R&D and roads projects. As per the website of Uttar Pradesh Government the following have been identified as investment opportunities Power, Food processing, Agro Based industries, Animal Husbandry, Engineering, Horticulture, Petrochemicals, Sugar and Silk.

Table 2-9 State wise break up of FDI Approvals (1991 - 2002)

Rank	State	No. of approvals	Amount of FDD (Rs. In billion)	Percent with total FDI
1	Maharashtra	3854	484	17.44
2.	Delhi	1857	335	12.06
3.	Tamil Nadu	2113	232	8.36
4.	Karnataka	1891	214	7.71
5.	Gujarat	1032	183	6.58
6.	Andhra Pradesh	975	128	4.59
7.	Madhya Pradesh	225	92	3.32
8.	West Bengal	584	87	3.15
9.	Orissa	136	82	2.96
10.	Uttar Pradesh	730	48	1.73
11.	Others	8105	891	32.10
	Total	21502	2776	100

Source: SIA News letter (* Figures for August 1991 to March 2002)

Table 2-10 Distribution of Investment - Industry wise as on July 2002

Sectors	All India		Uttar Pradesh		Percentage share of UP
	Rs. Bn	No.s	Rs. Bn	Nos.	
Food & Beverages	83.52	418	6.34	39	1.0
Food Products	70.40	318	5.36	33	0.8
Fertilizers	141.33	32	6.41	2	1.0
Organic Chemicals	568.76	61	10.00	2	1.5
Petroleum Products	789.62	37	107.24	3	16.5
Electrical Machinery	39.98	63	6.77	4	1.0
Electronics	171.43	361	31.71	28	4.9
Automobile	108.19	38	11.00	3	1.7
Electricity generation	512.69	636	179.69	20	27.7
Electricity distribution	161.91	230	10.88	7	1.7
Hotels & Tourism	151.19	206	37.04	6	5.7
Road Transport	986.22	1,031	82.99	94	12.8
Railway Transport	689.87	273	22.00	26	3.4
Misc. Services	1861.56	968	25.28	47	3.9
Commercial complexes	857.85	675	21.71	37	3.3
All industries	15650.76	6,684	649.80	379	4.2

Source: CMIE, August 2002

Table 2-11 Indicative list and estimated time of approvals and clearances required for setting up a new project in Uttar Pradesh.

Clearance and approvals required	Department	Time
Issuance of provisional registration	Directorate of Industries	Same Day
Permanent of registration of SSI	Directorate of Industries	30 days
Sanction of power load for construction	Uttar Pradesh State Electricity Board (UPSEB)	30 days
Sanction of power load for production	UPSEB	30 days
NOC for 29 highly polluting type of industries	Uttar Pradesh Pollution Control Board (UPPCB)	120 days
NOC for industries other than above 29 and the list of 220 non polluting industries	UPPCB	30 days
Grant of Consent to 29 types of highly polluting industries	UPPCB	120 days
Temporary registration of trade tax	Trade Tax Dept.	3 days
Permanent registration of trade tax	-do-	30 days
Inspection report for Trade Tax exemption/department	-do-	30 days
Decision at Commissioner's level after submission of Inspection report for Trade Tax exemption/deferment	-do-	30 days
Approval prior to construction of factory building/ use as a factory for non-hazardous industries	Labor Dept.	30 days
Approval prior to construction of factory building/ use as a factory for hazardous and major hazardous industries	-do-	60 days
NOC on Fire Safety from Fire Officer	Fire Dept.	30 days
Declaration of land as non agricultural	Revenue Dept.	30 days
Proceedings under section 154 of UP Zamindari Abolition Act	-do-	15 days
Allotment assurance from State Excise Dept.	State Excise Department	30 days
Excise License	-do-	30 days
NOC for Electrical Safety	Electrical Safety Directorate	60 days
Permission under Urban Land Ceiling Act	Electrical Safety Directorate	60 days
Building Map approval	Local Developmental Authority	30 days

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innovation, new business formation and economic growth (Husasin & Wang, 2000).

4. Financial development is influenced by the level and rate of growth in the per capita income (King & Levine, 1993; Rajan & Zingales, 1998). Venture capitalists act as catalyst for technological progress, thereby enhancing productivity and generating wealth for the entire economy (Koh & Koh, 2002).
5. Entrepreneurship and new firm formation is important for economic growth Feldman (2001). Venture capital can channel capital to new and innovative firms thus allowing entrepreneurs to pursue their goals. As shown by (Birch 1979; Kirchoff, 1994), among newly created firms, highly innovative firms create a disproportionately greater share of net new jobs than those new firms with less innovation intensity. This can promote regional economic development (Belke, Fehn & Foster, 2003).
6. The relationship between financial development (especially financial intermediation) and economic growth is been extensively analyzed since more than three decades ago. Goldsmith (1969), McKinnon (1973) and Shaw (1973) found strong and positive correlations between the degree of financial market development and the rate of economic growth.
7. Venture capital is a form of intermediation particularly well suited to support the creation and growth of innovative, entrepreneurial companies (Hellmann & Puri 2000, 2002b; Kortum & Lerner 2000). It specializes in financing and nurturing companies at an early stage of development (start-up) that operate in high-tech industries. For these companies the expertise of the venture capitalist, its knowledge of markets and of the entrepreneurial process, and its network of contacts are most useful to help unfold their growth potential (Bottazzi, Da Rin & Hellmann 2004; Gompers 1995b; Hellmann & Puri 2002b; Lerner, 1994, 1995;Lindsey, 2003).
8. Venture capital plays an important role in supporting entrepreneurial development and small business growth. (Sagari & Guidotti, 1991)
9. OECD (2000) report identified venture capital as a critical component for the success of entrepreneurial high-technology firms and recommended that all nations consider strategies for encouraging the availability of venture capital.

10. VCs back small and growing companies, which face more difficulties while seeking funding from other sources. (BVCA, 2001)
11. Venture capital accounts for about two-thirds of the external equity financing raised by privately held technology-intensive businesses from private-sector sources in USA. (Freear, & Wetzel, 1990)
12. Governments around the globe have been eager to duplicate the success of the fast-growing U.S. venture capital industry. These efforts share a common rationale: that venture capital has spurred innovation in the United States, and can do so elsewhere (EU, 1995).
13. Three Decades of Venture Capital Investment have yielded 7.6 Million Jobs and $1.3 Trillion in Revenue (NVCA, 2001).

The table given below shows the impact of Venture Capital Funding in US during the period 1970-2000.The amount invested, state wise sales of VC backed firms, employment and growth rate has been shown.

Table 3.1: The Economic Impact of Three Decades of U.S. Venture Capital Funding, 1970-2000.

State	Cumulative VC Invested, 1970-2000 ($ millions)	Sales of VC-Backed Firms, 2000 ($ millions)	Employment by VC-Backed Firms, 2000 (# of workers)	Venture Capital Invested, 2001 ($ millions) [Est]	5-Yr Compound Annual VC Growth Rate, 1996-2001
California	$108,810	$207,616	1,415,748	$14,431	24.3%
Massachusetts	25,986	48,848	381,433	4,456	35.7
Texas	17,189	158,183	676,158	2,679	29.8
New York	16,070	65,848	369,314	2,080	33.1
Colorado	9,881	14,565	62,971	1,227	32.1
New Jersey	9,138	38,151	260,114	1,207	23.3
Washington	7,383	75,392	263,585	908	20.9
Virginia	7,215	35,689	207,777	972	14.5
Pennsylvania	7,187	58,037	424,652	na	na
Georgia	6,435	62,797	338,188	996	34.5
U.S. Total	$273,300	$1,300,000	7,600,000	--	--

Source: Metzger & Brooks, 2005

Impact of venture capital on productivity –Venture capital investment is a major source of funding for new technology-based firms and is a key factor in promoting the development of radical innovations, as it can provide the necessary funding for the risky and uncertain innovation process especially for younger firms. The role of

venture capital in boosting productivity is also highlighted by a study of European union, 2006, which states that Venture capital will enable European firms to grow quickly than their US counterparts.

Impact of venture capital on technological innovation-Another indicator of the significance of venture capital investment is its impact on the innovation process. Kortum & Lerner (2000) studied the patents issued to twenty manufacturing industries during the period 1965-1992 and the venture funding to conclude that venture funding accounted for 8 percent of U.S. industrial innovations in the decade ended in 1992 and believe that this might have increased to as much as 14 percent by 1998. They also found that a dollar of venture capital was 3.1 times more likely to lead to a patent than was a general R&D dollar

Indications from other countries

Israel- the government initiated programs in 1991 Yozma and Inbal led to increase in venture capital under management from $29 mn in 1991 to $2 bn in 1997. Simultaneously there was a burst of investment by foreign high technology companies in R&D and manufacturing facilities.

Singapore-government started promoting Venture Capital in 1985, which led to an increase of more than six times in venture capital funding during the next decade. This resulted in an explosion in high technology R&D activity.

India – the role of venture capital in promoting innovation was highlighted by a report of Planning Commission New Delhi, July 2006, titled," Technology Innovation and Venture Capital". It states that Venture Capital is becoming a major mechanism for stimulating innovation and entrepreneurial growth and there has to be systematic initiatives for simulating entrepreneurship through use of venture funds. Entrepreneurs generally focus on technical aspects and not on business success. Venture capitalist brings the balance between business and technology so that innovation becomes a commercial success. The government of India has set up committee such as the Chandrashekhar committee to advise government on the issues in venture capital financing in India.

Impact of venture capital on Employment

Studies conducted in various parts of the world have highlighted the role of venture capital in generating employment. For instance a study conducted, between 1991 and 1995 in Europe shows that, net employment of the European venture capital-backed companies increased by 15% annually, whereas net employment in 500 most profitable non-venture capital-backed European companies increased by 2% annually in the same period. Likewise, in the US, employment by venture capital-backed companies increased by 25% on average every year for the period 1989- 1993, while employment by non-venture capital backed Fortune 500 companies dropped by a yearly average of 3% in the same time period (Eid, 2005).

In UK during the five year period to 2001/02, VCT backed companies increased staff levels by an average of 32% p.a., compared with a national growth rate of 1.5% p.a. In the five years, 1996-2001.Over this period, the average VCT backed firm more than doubled annual sales revenue from £4.3 million to £9.3 million. (BVCA, 2005)

A study conducted in Canada shows that employment in the venture-backed firms grew by 30 per cent a year (compounded) between 1989 and 1994, while employment in the Canadian economy as a whole was grew by only 3 per cent.

In India the potential role of venture capital is highlighted by Chandrasekhar committee (2000) on venture capital, which says that Venture capital has played a very important role in U.K., Australia and Hong Kong in development of technology growth of exports and employment. VC investment in India will result into substantial and sustainable employment generation of around 3 million jobs in skilled sector alone over next five years. Further the spin off effect of VC would create other support services and further employment opportunities. The consequence of which can put India on a path of rapid economic growth and a position of strength in global economy.

The overall consequences of VC on employment generation can be summarized as indicated by Kirchhoff, 1994. The fast growth of venture-backed companies increases the demand for qualified employees and attracts talented people to immigrate into the local area, thereby increasing the local population. This increased population, in turn,

increases the general demand for goods and services. As a consequence, additional innovative and non-innovative firms will come up and provide more job opportunities. Therefore, beyond the primary effect, secondary firm formations and employment occur within the local area and lead to further promotion of local economic growth.

3.2 Value added services provided by venture capitalist

Apart from financing, venture capitalists also provide value added services. Though, monetary capital infusion is a commodity-like process, VCs differentiate themselves by the quality of business, services and reputation capital they bring to their portfolio companies (Timmon & Sapienza, 2000). VCs argue that while start-ups might give up a larger equity stake in their company for a given capital infusion by a more experienced VC, the entrepreneur's remaining stake in his company will be more valuable in the future as a result of affiliation with the venture capitalist's value-added services such as business referrals, a portfolio of complementary companies, and extensive mentoring.

The value added role played by venture capitalist has been stated by Gorman & Sahlman (1989). They help in, obtaining additional finance, strategic planning, management recruitment, operational planning, introduction to potential customers and supplies, resolution of compensation issue

Another study by Sahlman (1990) states that "they sit on the board of directors, hire and recruit managers, help establish business strategies, provide industry knowledge, structure deals with suppliers and customers, and act as confidants to managers". This act increases the likelihood of success and it also enables venture capitalist to draw information about the quality of projects. The role of venture capital in monitoring and governance has also been highlighted by Lerner (1995). As per Frederickson (2000), they complement the management team by being active members on the board of the investee companies.

Carvalho, Charles & Matos (2005), have highlighted the human resources aspect of venture capitalist. They have stated that Venture capitalist supplement the human resource as, managerial resources often are particularly scarce in young, growing

firms; the most innovative entrepreneurs are not necessarily endowed with talents as managers. And, as the newly organized firm grows, its human resource needs become greater and more complex. Thus, it is often the case that realizing the potential of an entrepreneurial firm depends on its capacity to recruit high-level managers. Venture capitalists add value by bringing to their portfolio firms the capacity to attract superior management as they may have a comparative advantage in recruiting management for portfolio firms by virtue of their "networking" capabilities and access to private information about managerial talent based on their previous experiences with managers.

The general role of VC has been highlighted by various researchers, namely Bottazzi, Da Rin & Hellmann 2004; Gompers 1995b; Lerner 1994, 1995; Lindsey 2003. They have stated that Venture Capital specializes in financing companies that operate in hi-tech industries. It provides expertise related to, Knowledge of the market, Entrepreneurial process and Networking to help start-ups grow.

Hellman & Puri (2002a) have statistically confirmed that the services of venture capitalist are of economic significance, through a reduction in time to bring product to market and by inculcating professionalism in the start up companies. Investment by venture capital funds also act as signal for the quality of a firm's technology (Josh Lerner, 1996). By providing market linkages and sharpening the business plan Venture capital also helps in marketing (Bowonder & Mani, 2002).

As per BVCA, (2005), VCT managers provide more than just financial contributions to their investee companies. They are also an invaluable source of guidance and advice. Contributions cited by VC backed companies include, VC managers being used to provide financial advice, guidance on strategic matters and for management recruitment purposes as well as with their contacts and market information.

3.3 Role of venture capital in Initial Public Offerings (IPO's)

Venture capitalists play a number of roles in bringing the investee company to the stage of IPO and subsequently thereafter having a successful IPO. Megginson & Weiss (1991) have argued that because venture capitalists repeatedly bring firms to the public market, they can credibly stake their reputation. Put another way, they can

certify to investors that the firms they bring to market are not overvalued. Certification requires that venture capitalists has a reputation, that the acquisition of such a reputation is costly, and that the present value of lost reputations by cheating is greater than the one-time gain from behaving in a duplicitous manner. Megginson & Weiss have tested these ideas using a set of 640 venture-backed and non-venture IPO's between 1983 and 1987. Firstly, they examined the quality of the underwriters who bring firms to market. They show that the underwriters of venture-backed firms are significantly more experienced than the underwriters of comparable non-venture offerings. Secondly, Megginson & Weiss also find that institutional holdings of venture-backed firms after the IPO are larger than comparable non-venture companies. Thirdly, Megginson & Weiss gather evidence on expenses associated with going public. Venture-backed IPO's have significantly lower fees than non-venture IPO's. Fourthly, Megginson & Weiss have demonstrated that venture capitalists retain a majority of their equity after the IPO. Megginson & Weiss argue that this is a commitment device. Finally, Megginson & Weiss present evidence that the under pricing of venture capital backed IPO's is significantly less than the under pricing of non-venture IPO's.

VC-backed companies are worth more at IPO, experience of VCs adds value by bringing a company public at a higher rate, and sorting, which means that more experienced VCs invest in better companies. Both effects are found to be statistically and economically significant, with sorting appearing almost twice as important an influence for explaining the observed differences in IPO rates across VC investors. (Sorensen, 2006). Other reasons cited for help of venture capitalist in IPO's are, experienced VCs may be better at monitoring and managing companies and they may have access to larger networks, drawing on a greater number of contacts with suppliers, customers, and potential managers. This increase the chances of companies promoted by VCs to be successful and thus reach the IPO stage. (Hellmann & Puri 2002a; Hochberg, Ljungqvist & Lu (2006).

The number of VC backed IPOs and their amount for United States is shown in the figure 3.1 and 3.2.

Figure 3.1 Numbers of Venture-backed IPO's and Total Number of IPO's by Year in the United States.

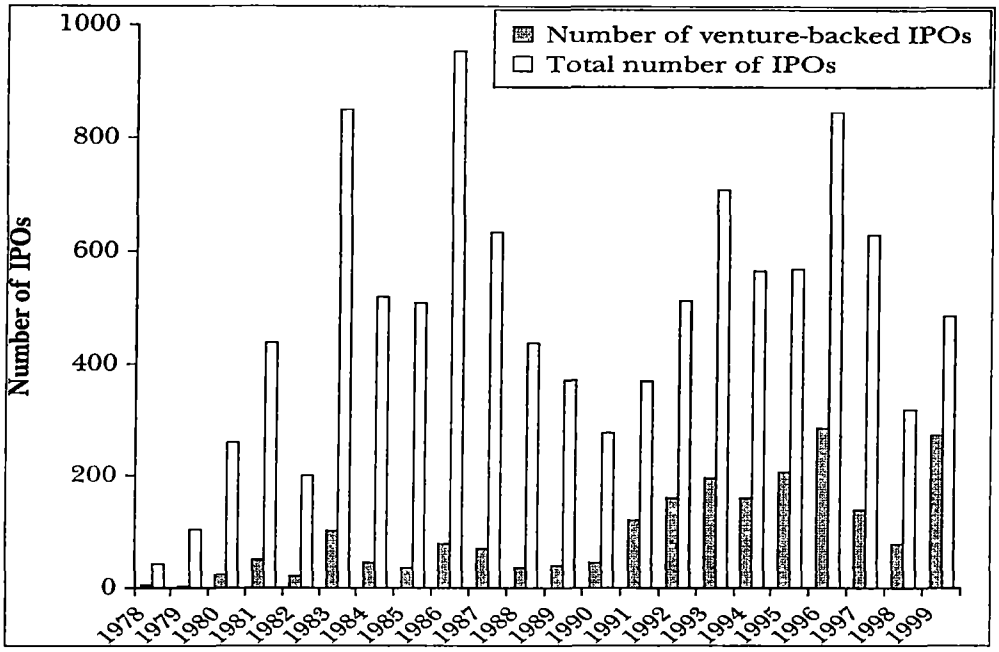
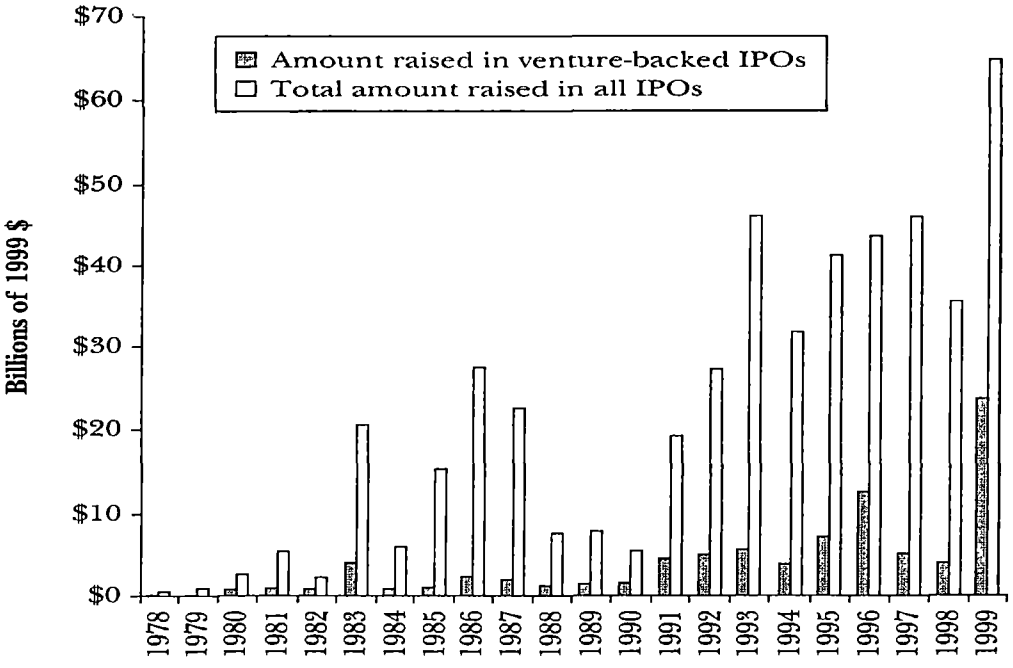


Figure 3.2 Dollar Volume of Venture Capital backed IPO's and All IPO's Year wise in the United States.



Sources: Barry et al. (1990); Ritter (1998)

3.4 Issues in venture capital financing

Venture capital represents one established solution to financing high-risk, high-reward ventures. Due to its distinguished and complex nature a number of issues are involved in venture capital funding.

3.4.1 Staging

The staging of capital infusions is the stepwise allocation of capital from VCs to entrepreneurial firms and, as suggested by previous literature, an effective way to mitigate information and agency problems (Gompers, 1995b, & Kaplan & Stromberg (2003, 2004)). Another advantage of staging as per Neher (1996) & Landier (2002) is that the venture capitalist's ability to deny financing at each stage forces the entrepreneur to exert higher effort and prevents her from diverting cash flows.

Sahlman (1990) notes that staged capital infusion is the most potent control mechanism a venture capitalist can employ. Prospects for the firm are periodically reevaluated. The shorter the duration of an individual round of financing, the more frequently the venture capitalist monitors the entrepreneur's progress and the greater the need to gather information. Staged capital infusion keeps the owner/manager on a "tight leash" and reduces potential losses from bad decisions.

The two commonly used methods of implementing staged financing for start-up firms are milestone financing, in which the firm receives a commitment for additional injections of financing after certain criteria (milestones) have been reached, and round financing, in which the firm has no explicit commitment, but goes to the venture capital market for additional financing (where it most probably can receive financing if it shows sufficient progress). Though Staged financing induces more efficient investment decisions in later stages but it can create a potential holdup problem. A commitment to later stage syndication can alleviate the holdup problem between the entrepreneur and the initial venture capitalist but introduces information revelation problems between the incumbent venture capitalist and members of the later stage syndicate Venture Capital (Fluck, Garrison & Myers, 2005)

Some literature also points to the ill effects of staging of VC investments. Cornelli & Yosha (2001) have argued that when the venture capitalist retains the option to abandon the project, if in the medium term he can receives a negative signal. In such

case, the entrepreneur has an incentive to engage in "window dressing" or short-term planning, i.e. to bias the signal towards positive values, in order to reduce the probability that the project will be liquidated.

3.4.2. Contracting

Academic literature on the principal-agent focuses on the conflicts of interest between an agent who is an entrepreneur with a venture that needs financing, and a principal, who is the investor providing the funds for the venture. Theory has identified a number of ways that the investor / principal can mitigate these conflicts.

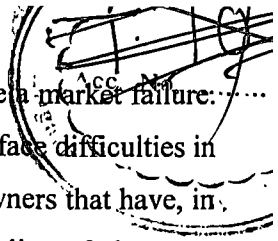
The venture capitalist's rights to decide on investment and to replace the entrepreneur play an important role in enforcing financial contracts between investors and entrepreneurs (Aghion & Bolton (1992), Fluck (2001) Hellman (1998).

The contracts between VCs and entrepreneurs are notably one-sided. VCs have huge power over portfolio companies. A large literature examines the provisions of these contracts, and explains them as protecting VCs against the risk of misbehavior by entrepreneurs (Kaplan & Stromberg, 2003). As the VC tries to maintain its reputation, it constrains VCs to honor an unwritten implicit contract to let successful entrepreneurs take their company public and thus retain control. In the presence of such one-sided contracts, reputation is one of the key mechanisms that can mitigate VC opportunism.

Some researchers have publicized the allegations of widespread VC misbehavior. While entrepreneurs rarely succeed suing VCs in court, their lawsuits have consequences far beyond the formal damages awarded. When VCs are sued, other industry participants react and the defendant VCs experiences difficulties in raising capital and also faces difficulties in finding new deals to fund (Vladimir & Vladimir, 2007)

3.4.3 Asymmetric Information, Signaling and Agency cost

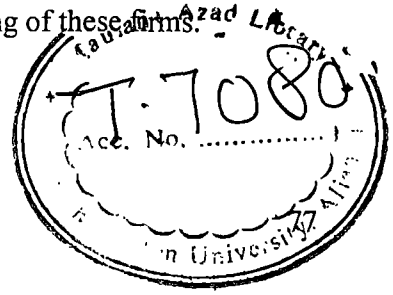
Asymmetric information refers to market information that certain economic actors possess but others do not possess. Akerlof (1970) demonstrated how the unequal distribution of information affects economic exchange. Using the market for used cars



as an example, Akerlof showed how quality uncertainty could cause a market failure. In the market for used cars, and several generalizations of it, buyers face difficulties in verifying the quality of the cars they intend to buy from previous owners that have, in contrast, developed an accurate understanding on the actual quality of the cars. However, the owners of good quality cars cannot convey their quality information reliably to the buyers. The owners of cars of inferior quality will claim their cars to be of good quality because they know that it is impossible for buyers to distinguish good cars from bad cars. Since all rational sellers claim their cars to be of good quality, the equilibrium price should be uniform across the market. However, because informational asymmetries prevent the buyers from distinguishing, buyers require a discount that offsets their risk of adverse selection based on the average quality of cars in the market. In the context of VC financing, entrepreneurs and existing shareholders may possess superior information about their firm in comparison with prospective outside investors such as VC.

Signaling refers to activities by which the effects of informational asymmetries can be reduced. Market signals are activities or attributes of individuals in a market, which, by design or accident, alter the beliefs of, or convey information to, other individuals in the market. Signaling was first formulated as part of economic theory by Spence (1973; 1974). Leland & Pyle (1977) demonstrated that the willingness of entrepreneurs to invest in their own project while raising debt produces an actual signal of the true quality of the project.

The nature of the firm's assets also has important implications for expected agency costs and the structure of staged venture capital investments. Intangible assets should be associated with greater agency problems. As assets become more tangible, venture capitalists can recover more of their investment in liquidation. This reduces the need to monitor tightly and should increase the time between refinancing. Industries with high levels of R&D should also have more frequent agency problems, and venture capitalists should shorten funding duration. Finally, Myers (1977) argues that firms with high market-to-book ratios are more susceptible to these agency costs, thus venture capitalists should increase the intensity of monitoring of these firms.



Gompers (1995b) tested the role of agency using a random sample of 794 venture capital-financed companies. The results confirm the predictions of agency theory. Venture capitalists concentrate investments in early stage companies and high technology industries where informational asymmetries are significant and monitoring is valuable. Venture capitalists monitor the firm's progress. If they learn negative information about future returns, the project is cut off from new financing. Firms that go public (these firms yield the highest return for venture capitalists on average) receive more total financing and a greater number of rounds than other firms (which may go bankrupt, be acquired, or remain private).

Apart from signaling another method to reduce information asymmetry is certification, which refers to the ability of a third party to reduce the quality uncertainty about parties associated with them. Booth & Smith (1986) modeled the ability of underwriters to certify the price of risky issues in markets characterized by asymmetric information between insiders and prospective outside investors.

3.4.4 Geographical Distance and Venture Funding

The role of spatial and network proximity for financial intermediaries has attracted significant attention in finance literature. This is confirmed by the finding that formal institutional networks are actually embedded in informal relationships through which transactions and information flows (Clark & O'Connor 1997).

Tian (2006) provides evidence that entrepreneurial firms located closer to their investing venture capitalists outperform other entrepreneurial firms and receive fewer financing rounds, have a longer duration between successive investment rounds, receive larger investment amounts per round, have a higher chance of successful exit, and have a better operating performance in the IPO year. The findings suggest that proximity allows VCs to monitor more effectively and consequently improves firm performance.

The mechanism of staging is used by about 80% of venture capital investments. Staging incurs negotiation and contracting costs. VCs must commit significant time and resources in negotiating and writing new contracts, including detailed evaluations of the different aspects of the firm such as its management team, technology,

products, and the industry in which it competes, before each new financing round. Second, the lag in implementing projects because of the successive capital infusions can increase costs for the entrepreneurial firm through longer development cycles, delays in market entry, and forgone economies of scale. VCs may balance the cost of monitoring an entrepreneurial firm with the cost of writing new contracts and delays in the firm's development due to staged capital infusions. Thus, if monitoring costs are low, VCs may try to reduce the costs of staging by reducing the number of financing rounds.

The importance of physical distance for information gathering is also high lighted by Coval & Moskowitz (2001) they show that, geographical proximity is inversely related to the cost of information acquisition.

3.4.5. Syndication of Venture Capital Investments

Wilson (1968) defined a syndicate as "a group of individuals who must make a common decision under uncertainty that will result in a payoff to be shared jointly among them". In the context of financial markets, syndicates are groups of investors that jointly make an investment decision. These syndicates are commonly formed among lenders (syndicated loans) and equity investors such as venture capitalists (Wilson 1968).

In the context of venture capital a syndication relationship exists when at least two venture capitalists invest in the same venture in the same financing round (Bygrave 1987; 1988 and Lerner 1994). Venture capitalists, upon finding a promising firm, typically do not make a binding commitment to provide financing. Rather, they send the proposal to other venture capitalist for their review. Willingness of other venture capitalists to invest in the firm may be an important factor in the lead venture capitalist decision to invest (Pence,1982).

Why syndication is done? Venture capitalist syndicates their investments with other venture capitalists to distribute risk, for seeking advice about the startup firm and to cross check on the investment decision (Gompers & Lerner 1999). Other rationales have been proposed to explain why venture capital firms syndicate.

- Venture capitalists may syndicate to share risk (Lockett & Wright, 2001).
- To improve decision-making by joint decisions (Lerner, 1994).
- To window dress (Lerner, 1994).
- To improve capabilities to add value. The potential value-adding activities of a venture capitalist include, for example, monitoring financial and operational performance, recruitment of management, arranging financing from complementary sources, serving as a sounding board to the entrepreneurial team, arranging incentive plans, providing access to auditors, lawyers and investment banks, and setting company policies (MacMillan et al., 1988; Gorman & Sahlman, 1989; Sapienza, 1992; Sapienza et al., 1996; Hellman & Puri, 2000; 2002b).
- Social reasons. The formation of syndication relationships may also reflect the venture capitalists' need to establish social status (Podolny, 2001). Firms with many relationships with other well-connected firms have high status and gain reputation benefits. As a result, venture capitalists may attempt to establish syndication relationships to generate and maintain status-enhancing organizational connections.

3.4.6 Valuations of Venture Capital Investments

Valuation means the process of placing a monetary value on an investment opportunity. It is the price of an investment, a security, or a company that the buyer and seller agree upon prior to completing a transaction. The value of the company determines the percentage of equity the venture capitalist receives in return for their investment and thus their ultimate return. The valuation process is also important for the entrepreneur, because a low valuation will lead to an excessive dilution of their share in the company. (Abeer & Leece, 2004).

Valuing early-stage high-technology growth-oriented companies is a challenge to current valuation methodologies. The traditional approach to project analysis requires the forecasting of future cash flows and discounting these to present value at some risk adjusted rate. Two valuation approaches that have received particular attention in the literature are discounted dividend yield methods and discounted future cash flow methods. Venture capital firms, for two reasons, rarely use the dividend yield method. Firstly, most venture capital investments are placed in the early stages of a company's

development, in which dividends are rarely being distributed. Secondly, if the investment is in the expansion, or later stages, in the potential companies a request for funds from a venture capitalist is likely to reflect cash constraints and thus dividends may not be an option for valuation (Wright & Robbie 1996; Manigart, et al 1997).
Another perspective used to explain valuation is by Gompers & Lerner (2000) who examined how the inflow of capital into venture funds affects the valuations of new investments. Their results indicate that fund inflows tend to inflate venture valuations, because excess money available for investments intensifies competition for a limited number of attractive targets. Furthermore, Gompers & Lerner (2000) did not find changes in valuations to be related to the ultimate success of the ventures. Contrary to the efficient market hypothesis, changes in the supply of capital were found to have an immediate impact on the valuations venture capitalists place on new investments. Analyzing venture capital valuations and the true return on investments is difficult because typical data sets available to researchers suffer from selection bias (Cochrane, 2001)

3.4.7 Returns on Venture Capital

A VC invests its funds in risky business ventures and also incurs managerial time as they oversee the investee companies. In lieu of which VC expects return. Many previous studies have been carried out on the returns of venture capital; both anecdotal and empirical research has been done. Kenney (2000) provides a thumb rule of the returns. Out of ten investments three or four investments are expected to fail at a near total loss. Another three of four neither fail nor are easily liquidated. These are termed the "living dead" and are judged failures by the venture capitalists. For the successful funds it is the final two or three that determine the return. In these cases one or two investments provide returns of ten to over one hundred times the initial investment. It is these successes that compensate for the failures and complete the venture capital cycle.

As shown in table 3.2, Runhka & Young have provided empirical evidence regarding the stage-wise return of venture capital investments. While venture capitalists require an average rate of return of 65-70% for seed-stage investments, later stage investments can be accepted at 25-35% return. The variations in returns as per the stage of investments have also been shown by Wetzel (1981).

Table 3.2 Venture capitalists' required rates of return for different stages of development as reported in earlier research

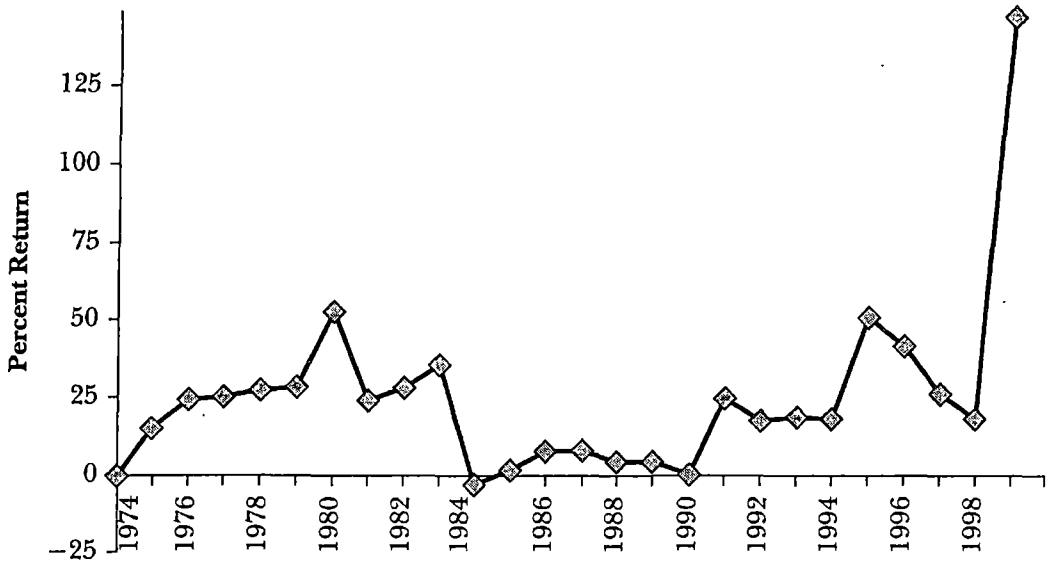
	Rate of return demanded	
Coded as stage	Ruhnka & Young (1987, 1991)	Wetzel (1981)
Seed	73.0%	50.0%
Start-up	54.8%	50.0%
Second	42.2%	37.5%
Expansion	35.0%	30.0%
Later	35.0%	22.5%

Empirical researches have provided that, VCs usually charge a two percent annual management fee, and retain 20 percent of the profits they make on their portfolio investments (Gompers & Lerner 1999). Cochrane (2005) also proved that venture investments yield returns several points above what their risk characteristics would warrant by deriving alpha, the pure annual excess return over the risk-adjusted benchmark to be 32 percent per year, with a standard error of 9 percent. However other authors have different estimates for example, Ljungqvist & Richardson (2003) find it to be at least five percent, and Kaplan & Schoar (2005) argue that it may well be four or five percent, and Hall & Woodward (2007) estimate it at around two percent. The differences in these figures can be attributed by the fact that returns of venture capital funds are highly correlated with the returns on the market as a whole (Cochrane, 2005).

Furthermore, venture capitalists require compensation for their efforts in developing the venture. Manigart et al. (2002) surveyed the determinants of venture capitalists' required rates of return in five countries. They found that VCs with more intensity of involvement require higher rates of return, and that the rate of return declines with the stage of development of the venture.

Pandey (1996) found that venture capitalist expect a return of 25 percent and above over a five year period, while Kumar & Kaura (2003) through a sample of Indian venture capitalist concluded that in lieu of the risk faced in financing of untried ideas venture capitalist expect a return of 40 percent from their investments.

FIGURE 3.3 Average Annual Rate of Return received by investors in U.S. Venture Capital Funds



Compiled from Venture Economics data, 2002.

Table 3.3 U.S. Venture Capital Returns by Fund Type and Investment Horizons

Time	3 months	1 year	3 year	5 year	10 year	20 year
Early / Seed Stage	-3.3%	-20.6%	81.4%	55.1%	34.5%	22.4%
Expansion Stage	-2.6	-16.1	46.3	35.5	24.7	16.6
Later Stage	-2.7	-16.3	28.3	24.6	25.4	17.4
All Venture	**-2.9%**	**-18.2%**	**54.5%**	**40.0%**	**28.4%**	**18.7%**

National Venture Capital Association (2001)

3.4.8 Risk in Venture Capital Investments

By its very nature of financing new/unproven start ups venture capitalist face a high risk. As per Golder & Tellis, 1993, a venture that invest in to a new technology faces a number of risk for example, the risk that as alternate technologies emerge, its *technology will not perform as expected, and/or there will be little or no demand. As*

the technology and market are new, pioneers also face risk of technical and demand uncertainty (Aaker & Day, 1986).

Also a reluctance to withdraw too quickly from mature technologies that are highly profitable (Yip, 1982) creates an inertia, which makes change difficult. Later followers are better able to recognize the attractiveness of a market and identify the key success factors thus are able to minimize the costs of entry. Leland & Pyle (1977) divided risks into three types

- Associated with external uncertainty (Market size, Customer adoption rates).
- Associated with internal uncertainty (Management quality)
- Associated with complexity (Product or technological innovation)

Structured attempts to analyze the risk-return trade-off of venture capital investments were made by Huntsman & Hoban (1980). They found that venture capital investments offer attractive returns, on average 18.9% year-on-years. Studies by Ruhnka & Young (1991) developed a framework for venture capitalist risk perceptions and risk-reduction strategies. Early-stage investments are regarded as significantly more risky than later-stage investments and so demand a higher compensation (refer table 3.2).

Other empirical research by Hall & Woodward (2007) has shown that the beta of venture is about 1.7 i.e. venture investments are exposed to significant levels of systematic risk.

3.4.9 Control and mitigation of risk

Many entrepreneurs either do not seek or decline venture capital funding because of a fear of losing control of their business or new product ideas. This fear underlies the use of the term "vulture capital" (David, Kris, & Michaela, 2004). The fear of VC controlling the firm is also highlighted by Kirilenko (2001), who presented a model of relationship between a venture capitalist and an entrepreneur engaged in the formation of a new firm. Through theoretical modeling, he showed that the venture capitalist demands disproportionately higher control rights than his equity investment, and that the entrepreneur is compensated for the loss of control through improved valuations

The ownership stake that venture capital firms generally take in their portfolio companies typically run in the 30-40% range. In return for their investment, venture capital firms have some type of "say in" or influence over business management decisions. Typically, venture firms have a seat on the board of directors for the portfolio company and are intimately involved with the company in which they invest (Small Business Notes, 2004). In this regard, they provide company management with contacts and help in formulating strategies. Visiting and talking to company management is done to maintain close relationships. According to Sahlman, 1990,venture capitalists visit each of their portfolio company on average 19 times per year resulting in a 100 hours of direct (phone and in person) contact.

Sahlman (1990) suggest that proper structuring of the investment contracts can offset conflicts. Venture capitalist provide funds to the entrepreneur this may crate conflict of interest leading to extra cost (agency cost). He has suggested that staged capital infusion is the most potent control mechanism a venture capitalist can employ. Prospects for the firm can be periodically reevaluated to monitor the progress and approve further funding. This will keep the entrepreneur on a tight leash thus enabling better control.

Other mechanism utilized by venture capitalists to avoid conflicts is the widespread use of stock grants and stock options. Managers and critical employees within a firm receive a substantial fraction of their compensation in the form of equity or options. This tends to align the incentives of managers and investors. Baker & Gompers (2004) examine the role that venture capitalists play in setting compensation and incentives of entrepreneurs. They find that venture capitalist increase the sensitivity of management's compensation to the firm's performance relative to similar non venture capital-financed companies. Fixed salaries are lower and the size of the equity stake held is higher for venture capital-backed CEOs.The venture capitalist also employs additional controls on compensation to reduce potential misuse by the entrepreneur. Firstly, venture capitalists usually require vesting of the stock or options over a multi-year period. In this way, the entrepreneur cannot leave the firm and take his shares. Similarly, the venture capitalist can significantly dilute the entrepreneur's stake in subsequent financings if the firm fails to realize its targets. This provides additional

incentives for the entrepreneur. In order to maintain his stake, the entrepreneur will need to meet his stated targets.

Kaplan, Steven & Per Stromberg (2000) have also identified a number of ways that the investor / principal can mitigate risk due to conflicts of interest between an agent, who is an entrepreneur with a venture that needs financing, and a principal, who is the investor providing the funds for the venture. First, the investor can structure financial contracts, i.e. the allocation of cash flow and control rights, between the entrepreneur and investor to provide incentives for the entrepreneur to behave optimally. Secondly, the investor can engage in information collection before deciding whether to invest, in order to screen out unprofitable projects and bad entrepreneurs and lastly, the investor can engage in information collection and monitoring once the project is under way.

Other researchers have also highlighted the importance of controls that a venture capitalist needs in order to oversee the portfolio companies (Lerner, 1995) and it is suggested that to enable better control VCs should hold their equity stake constant across financing rounds (Admati & Pfleiderer, 1994).

3.4.10 Corporate Governance

Instead of monitoring the day-to-day operations of a company VCs intensively monitor the managers of businesses in which they invest (Gorman & Sahlman 1989). When there is a gap in the management team, VC increases its involvement in the affairs of the investee company (Lerner 1995). Acting through the board of directors, VCs also have the power to hire and fire the senior management of their portfolio companies. Monitoring and involvement results in numerous positive effects, one of them being the inculcation of better governance (Kaplan & Stromberg 2003).

Hochberg (2005) finds that VC-backed IPO companies have more independent boards, better audit and compensation committees, a higher likelihood of separating the roles of CEO and chairman of the board and higher stock market reaction to the announcement of poison pill adoption.

Wan 2007, examined variations in corporate governance of startup companies that received first round venture capital funding and show that their board characteristics

and financial reporting quality are related to the quality of their VC backers. (VC quality being the number of prior investments a VC has made, and the number of VCs syndicating those deals). When backed by higher quality VCs, startups subsequently have larger boards with more independent directors, and benefits from increased presence of the investing VCs on their boards. The results suggest that higher quality VCs help establish better governance at companies in which they invest and these findings suggest that when entrepreneurs seek venture funding, it can have longer-term governance implications for their companies.

3.5 Role of government in promoting Venture Capital

Realizing the need to support new and small growing organization with fund in addition to the necessity of directing investments into areas of social and economic priority many U.S., European and Asian nations have adopted initiatives to promote venture capital.

In the USA, the Small Business Investment Company (SBIC) program led to the provision of more than $3 billion to young firms between 1958 and 1969, more than three times the total private venture capital investment during these years (Noone & Rubel 1970). One of the key rationales for the establishment of the SBIR program was that imperfections existed in the market for the financing of young technology-based firms. These firms are characterized by considerable uncertainty and information asymmetries that permit opportunistic behavior by entrepreneurs. As discussed above, the bulk of the equity invested in these firms came from venture capitalists (Josh Lerner, 1996). Public venture capital programs have also had a significant impact overseas, for instance, these programs have accounted for more than one-half of the recent investments in new technology –intensive firms of German (Wupperfeld ,1992).

Table 3.4 Role of government in promoting Venture Capital

Country	Funding support	Incentives schemes/ regulations
US	Small Business Investment Company (SBIC) program, Small Business Innovation Research (SBIR), Rural Business Investment Company (RBIC), New Markets Ventures Capital (NVMC)	Business Development Companies (BDCs)
UK	Small Business Investment Company (SBIC) program, Small Business Innovation Research (SBIR), Rural Business Investment Company (RBIC), New Markets Ventures Capital (NVMC)	Enterprise Investment Scheme (EIS), Venture Capital Trusts (VCT)
CHINA	National Development and Reform Commission (NDRC).	National Development and Reform Commission (NDRC) initiative to offer better tax treatment and exit route for domestic VCs
ISRAEL	Yozma, R&D fund, Tnufa, Nofar, Heznek, Magnet and Mini Magnet, Bi-national funds, Multinational agreements.	
SINGAPORE	Startup Enterprise Development Scheme (SEEDS), Growth Financing Program, Venture Investment Support for Startups (VISS) Fund, Enterprise Fund	Technopreneur Investment Incentive, Enterprise Investment Incentive Scheme
AUSTRALIA	Innovation Investment Funds I & II	Venture Capital Limited Partnerships (VCLPs), Pooled Development Funds (PDFs)
CANADA	Ontario Community Small Business Investment Fund (CSBIF), Seed funds of the Business Development Bank of Canada (DBC), Subordinated financing of DBC, Regional venture capital funds	Labour Sponsored Venture Capital Corporations (LSVCCs), Employee Venture Capital Corporations (EVCCs), Quebec Stock Savings Plan (QSSP).
TAIWAN	Initial capital to VCs	Tax credit on investments
KOREA	SBA and MIT provide co-investment in venture capital funds as limited partner, credit guarantee, R&D bank	Tax incentives

Lerner, 1999

3.6 Factors influence the quantum of investments made by Venture Capitalist

Venture capital investments are not constant; they may increase and decrease from year to year. Literature has tried to identify the influencing factors for this. Poterba (1989) argues that many of the changes in fundraising could arise from changes in either the supply of or the demand for venture capital. The supply of venture capital refers to the desire of investors to place money into venture capital funds while demand is the desire of entrepreneurs to attract venture capital investment in their firm. Factors have been analyzed from the point of view of demand and supply. For example, decreases in capital gains tax rates might increase commitments to venture capital funds as new commitments become more profitable both for the venture capitalist and for the entrepreneur. Going by the same logic the reverse would hold in case of increase in the capital gains tax. Apart from capital gains tax other factors also matter. Gompers & Lerner, 1999 have stated the following factors:

- Higher GDP growth and increase in R&D spending leads to greater venture capital activity.
- An increase in the number of good quality firm start-ups leads to more demand for venture capital. Effect of quality of investment proposal is also highlighted by Kumar (2002), who shows that the VC investment committed to India are more than the VC funds invested, reason of this difference being the lack of good quality projects.
- Any policies that can increase the relative attractiveness of becoming an entrepreneur and promote technology innovation would an effect on venture capital investments.
- The decision to invest also depends on both the past performance and future expectation of returns of the venture capital funds.

3.7 Investment Criteria used by venture capitalist in evaluating new ventures

Since providing finance to untried ideas is fraught with danger of significant capital loss, Venture capitalists use a number of criteria to judge the suitability an investment proposal from an entrepreneur. A number of studies on identifying the investment criteria being used by venture capitalist for screening the ventures have been conducted both abroad and in India. (Details of 28 international and 7 Indian studies

have been summarized in the table attached). These studies though different in their approaches, have brought to notice certain criteria, which are considered important in most of the studies.

3.7.1 International studies on Investment Criteria used by venture capitalist in evaluating new ventures

Prior research has identified a number of key investment criteria used by VCs for evaluating entrepreneurs' business proposals, and has established their relative importance. VCs use a wide range of investment criteria for screening and evaluating entrepreneurs' business proposals (Tyebjee & Bruno, 1981; 1984; Fried & Hisrich, 1994; Shepherd, 1999).

Starting in the early 1970s (Hoffman, 1972; Wells, 1974; Benoit, 1974), scholars began to carry out studies seeking to identify VCs' investment criteria, and to establish their relative importance for VCs' financing decisions.

Tyebjee & Bruno (1984) tried to ascertain the factors, which influence the investment decisions of venture capitalist and identified a number of important criteria in their study. Another study conducted by Macmillan, Siegel & Narasimha (1985) carried out a two-step study in which they identified twenty-seven criteria for evaluating investment proposal by venture capitalist. Different studies have highlighted the importance of various criteria used by venture capitalist. In spite of a number of differences in the outcome many common features have emerged.

Table 3.5 summarizes the previous studies on venture capital. It gives the focus of the past studies, their sample size, the data gathering techniques used in the study and the techniques used to analyze the data. Table 3.6 presents prior studies in terms of their focus, sample, data gathering and data analysis. The numbers in the cell show the relative importance of each criterion in the respective study.

Table 3.5 Prior Studies: Focus, Sample Size, Data Gathering Techniques and Analysis Techniques

Author(s) and Date	Focus	Sample	Data gathering	Data Analysis
Hoffman. 1972	VC Investment Process	39 VCs	Questionnaires and interviews	Descriptive
Wells. 1974	VC decision making	10 VCs at 7 VC firms	Interviews & questionnaires	Qualitative analysis. correlation
Poindexter. 1975	Efficient markets	91 VCs	Questionnaires	Ranking scale
Benoit. 1975	VCs' investment behavior	22 VCs	Questionnaires & Interviews	Qualitative analysis. counting
Tyebjee & Bruno. 1981	Decision making	46 VCs	Questionnaires VCs' evaluations of deals. interviews	Counting. Factor analysis
Tyebjee & Bruno. 1984	VC investment activity	41 VC firms	Questionnaires 41 respondents evaluated 90 proposals	Counting. Factor analysis
MacMillan. Siegal. & Narasimha 1985	Investment criteria	14 VCs + 102 VCs	14 interviews and 102 returned Questionnaires	Factor analysis
MacMillan Zemann. & Narasimha. 1987	Criteria distinguishing successful VC firms in the screening process	6 VCs (initial interviews) + 67 VCs evaluated 150 ventures	6 structured personal interviews + 67 returned questionnaires	Cluster analysis Factor analysis
Khan. 1987	Noncompensatory behavioral decision models	36 VCs	VCs' reports on their investments	Conjunctive and disjunctive actuarial models used to model VCs' judgments and the environment

Author(s) and Date	Focus	Sample	Data gathering	Analysis
Robinson. 1987	VC firms' strategies	53 VCs	Questionnaires	Ranking of mean importance scores Varimax rotated factor analysis
Siskos. Zopounidis. 1987	VCs' evaluation criteria	1 VC firm	From existing research	Modeling
Sandberg, Schweiger. Hofer. 1988	VCs' decision processes	1 VC; 40 thought units	Proposals for evaluation	Verbal protocol analysis
Hall. 1989	VCs' decision making	4 VCs	Interviews in-person or on the phone	Verbal protocol analysis
Hisrich Jankowicz. 1990	Intuition in VCs' decisions	5 VCs (6 proposals)		Repertory grid technique
Riquelme & Rickards. 1992	Hybrid conjoint analysis applied to VCs' decision making	13 VCs	Interview	Modeling
Fried & Hisrich. 1994	VCs' decision making	18 VCs	Interviews	Analysis of VCs' responses
Rah. Jung. Lee, 1994	Venture evaluation in Korea	74 VCs	Questionnaires and interviews	Factor analysis and discriminant analysis
Knight. 1994	VCs' investment criteria: a cross cultural analysis	31 VCs: 50 SBDCs	Questionnaires	Rankings of responses
Zacharakis. 1995	The venture capital investment decision	51 VCs in three groups	Scenarios' Semi-structured Interviews	Regression
Muzyka, Burley. Leleux. 1996	Trade-offs in investment decisions	73 VCs	Questionnaires and interviews	Conjoint analysis: evaluate matrices based upon a pair of investment criteria

Author(s) and Date	Focus	Sample	Data gathering	Analysis
Boocock & Woods 1997	VCs' evaluation criteria	232 business proposals received by a VC fund	Business proposals	Analysis of the reasons for proposal rejection
Zutschi, Tan. Allampalli, Gibbons. 1999	Singapore VCs' Investments' Evaluation Criteria	31 VCs	Questionnaires	VCs' ratings used to establish which investment criteria are more important
Shepherd. Ettenson. Crouch. 2000	VCs' Assessments of new venture strategy and profitability	66 VCs representing 47 VC firms	Conjoint decision making task administered in person or by mail	Conjoint Analysis OLS regression
Bachher. 2000	VCs' investment criteria in technology-based new ventures	100 VCs	Interviews and web-based surveys	ANOVA
Kaplan & Stromberg. 2000	How do VCs choose their investments?	10 VC firms; 58 investments in 40 companies	Interviews and surveys.	Regression
Kumar Kaura. 2003	VCs' screening criteria	11 VCs	Questionnaires	Kendall's tau-c used to assess the association among variables (a measure of agreement among raters)
Silva. 2004	VCs' decision making in small equity markets	1 VC firm; 16 early-stage proposals	Participant observation (internship)	Grounded method: observation and interpretation

VCs' Evaluation Criteria Reported in Prior Studies

The criteria can be regarded as independent variables, and the decision to invest can be regarded as a dependent variable. Investment criteria can be grouped into the following categories:

1. Characteristics of entrepreneurs
2. Characteristics of the product/services
3. Characteristics of the target market
4. Features of deal quality

Table 3.6 Prior Studies: VCs' Investment Criteria

Studies/Criteria	TMT	Market	Market Growth	Product	Risk	Returns	Exit	Deal	Strategy	Customer	Competition
1. Hoffman. 1972	2	3		1							5
2. Wells, 1974	1	3		2							
3. Poindexter. 1975	1				3	2		4			
4. Benoit. 1975	1	3		5		2					4
5. Tyebjee & Bruno.1981	3	2			4	1	5				
6. Tyebjee & Bruno. 1984	3	1		2			5				4

Studies/Criteria	TMT	Market	Market Growth	Product	Risk	Returns	Exit	Deal	Strategy	Customer	Competition
7. MacMillan, Siegal, & Narasimha, 1985	3						2		4		1
8. MacMillan, Zemann, & Narasimha, 1987		2									1
9. Khan, 1987	1				2						3
10. Robinson, 1987	4	2							3		
11. Siskos, Zopounidis, 1987	4	1				2					
12. Sandberg, Schweiger, Hofer, 1988	3	2				4					1
13. Hall, 1989		1	2								3
14. Hisrich, Jankowicz, 1990	1										
15. Riquelme & Rickards, 1992	1			2							
17. Fried & Hisrich, 1994	2					3					
18. Rah, Jung, Lee, 1994	1	2		3		4					
19. Knight, 1994	1	3		2		4					

Studies/Criteria	TMT	Market	Market Growth	Product	Risk	Returns	Exit	Deal	Strategy	Customer	Competition
20. Zacharakis, 1995	2	1	4	3							5
21. Muzyka, Burley, Leleux, 1996	1	2		3		5		6	4		
22. Boocock & Woods 1997	5	2			6			4			
23. Zutschi, Tan, Allampalli, Gibbons, 1999	1	2		4		3					
24. Shepherd, Ettenson, Crouch, 2000	1					3					2
25. Bachher, 2000	1	2		3		5					
26. Kaplan & Stromberg, 2000		1		2							4
27. Kumar & Kaura, 2003	2	3			1	4					
28. Silva 2004	1		3					5		4	

Khanin, 2006

3.7.2 Indian studies on Investment Criteria used by venture capitalist in evaluating new ventures

Pandey (1996) was the first to ascertain the evaluation criteria used by Indian venture capitalist. His study was based on Macmillan, Siegel & Narasimha's (1985) work and was adapted to Indian conditions adding 21 new variables to it. The study found 11 major criteria, prominent among them was integrity, managerial skills, long-term vision, commercial orientation, liquidity of investment and strategy.

Table 3.7 Summary of major Indian studies

Study	Method/date	Sample	Statistical analysis	Summary of findings
Pandey (1996)	Questionnaire	9 venture capital firms	Means and frequencies	Identified 11 essential criteria that VC rated very high.
Kumar, Asim (1996)	Annual reports	10 venture capital firms	NA	Presents a perspective of Indian VC industry. Identifies problems with regard to policy and taxation.
Verma (1997)	Data of IVCA	12 venture capital firms	NA	Presents a perspective of Indian VC firms.
Pandey (1998)	Company information	1 venture capital firms	NA	Presents the experience of TDICI, documents problems faced in developing its business.
Mitra (2000)	IVCA annual publication	11 venture capital firms	NA	Presents factors that restrict the growth of the industry.
Kumar, vinay (2002)	Questionnaire	12 venture capital firms	Principal component analysis	Studies investment preference vis-à-vis venture stages and finds that location and ownership that a venture capitalist can buy are the preference for early and late stages respectively.

Kumar & Kaura, 2003

3.7.3 Focus prior studies of VCs' decision making

Many prior studies of VCs' decision making reported have focused on finding through interviews and surveys of VCs a list of criteria VCs use to evaluate ventures for a possible financing. Some researchers have been interested in identifying the main stages of the VC investment process (Hoffman, 1972; Tyebjee & Bruno, 1984; Hisrich & Fried, 1994) and ascertaining the group of investment criteria VCs utilize throughout that process.

Researchers have focused on finding the investment criteria used by successful VC firms (McMillan et al., 1987;Pandey, 1985). Some scholars sought to establish whether VCs in their home country use similar investment criteria as those employed by VCs in North America (Zutschi et al., 1999;Rah, 1994). A number of studies have focused on a specific market such as high technology (Bachher, 2000). Others have zeroed in on some aspects of VCs' thought process, for example, the role of perception in VCs' decision-making (Hisrich & Jankowicz, 1990; Hall, 1989).

3.7.4 Sample of prior studies on Venture Capitalists' Decision Making

Scholars have gathered their samples via interviews, surveys or a combination of these two methods. The studies have used as their unit analysis a survey filled out by an individual VC; a business proposal evaluated by a VC; or a VC's comments with respect to an analyzed business proposal (Hall, 1989).

Usually samples have been small. Well (1974) has interviewed 10 VCs. Hall (1989) has interviewed 4 VCs. Kaplan & Stromberg (2000) have interviewed 10 VCs' 58 investments (in this case, "investment" was the unit of analysis). Kumar et al. (2003) has interviewed 11 VCs from India. Silva (2004) has focused on one VC firm in Portugal (he has used the method of participating observation). Muzyka et al. (1996) have interviewed 73 VCs (among three scholars) and Rah et al. (1994) have interviewed 74 VCs. MacMillan et al. (1985) have only interviewed 14 VCs but surveyed 102 VCs. In most foreign studies, samples are between 10 to 30 interviews and/or surveys while Indian studies the sample size is usually less than 10.

3.7.5 Data Gathering techniques of prior studies of VCs' decision making

Most studies have used the following sequence of steps for data gathering. To start with, scholars approached a few VCs for a preliminary interview. On the basis of such interviews, researchers have compiled lists of VCs' investment criteria. Conversely, some have derived VCs' investment criteria from the relevant concepts in strategy and economics (Shepherd, 1999; Shepherd et al., 2000).

The second step was to classify the criteria into groups such as entrepreneurship, product, market, deal and regional criteria. At the third step, researchers mostly have tested on a larger sample the investment criteria they had compiled via initial interviews of VCs or had derived from the relevant concepts in economics literature.

Researchers have typically contacted several VCs in their area to conduct initial interviews. Though scholars have not discussed how they secured these initial interviews but it can be presumed that they have directly approached some prominent VCs in their community.

Finally to gather data, scholars frequently mailed questionnaires to all members of a VC association (national or regional). The response rate was typically about 20%. Most scholars used a combination of interviews and surveys. Some only conducted surveys. A few researchers (Hall, 1988; Hall & Hofer, 1993) have conducted a live observation in which they asked VCs to assess investment proposals in their presence and comment on them.

3.7.6 Data analysis techniques used in prior studies of VCs' decision-making

In the beginning, researchers asked VCs to rate their investment criteria on a four-point scale and subsequently rank ordered their aggregate appraisals (Hoffman, 1972; Wells, 1974). Later, scholars began to use factor analysis and cluster analysis (Tyebjee & Bruno, 1981; 1984; MacMillan et al., 1985, 1987) to establish whether their proposed classification of investment criteria into groups could be supported. In most cases, factor analysis revealed that VCs have applied their investment criteria in a different way than originally hypothesized by scholars (Tyebjee & Bruno, 1984; MacMillan, 1985; 1987). Sandberg et al. (1986) and Hall (1989) have criticized prior research on VCs' investment criteria based on VCs' self-reports due to its common

bias, overstating the number of investment criteria and understating the importance of the key investment criteria. Sandberg et al, 1986; Hall, 1989; Hall & Hofer 1993, begun conducting studies based on verbal protocol analysis by asking VCs to think aloud while assessing real proposals in order to capture VCs' underlying "thought units."

Riquelme & Rickards (1992) have criticized verbal protocol analysis for being too subjective. They have proposed applying conjoint analysis to reveal the importance of each investment criteria by contrasting them one to another in pairs. A large group of researchers has time after time employed conjoint analysis to identify VCs' "in-use" as opposed to "espoused" investment criteria and, thus, overcome the limitations of VC self reports (Muzyka et al., 1996: Shepherd, 1999; Shepherd et al., 2000; Shepherd & Zacharakis, 1998).

3.8 Findings in Indian and foreign studies on the Venture Capitalists' decision-making criteria

Various criteria have been identified in the previous studies. These criteria can be understood in terms of the features of the entrepreneurship, product, market, deal and regional criteria.

3.8.1 Previous studies on the entrepreneurship qualities

Indian studies -Venture capitalist performs a careful analysis to be sure that entrepreneur has certain key characteristics needed to thrive in competitive business world. Studies in India gave the following results as shown in table below. In previous Indian studies, Pandey (1995) highlighted that Venture capitalists consider the entrepreneur's integrity and urge to grow as the most important aspects. While another study by Mishra (2003) also gave similar results with integrity, long-term vision and urge to grow as the top three entrepreneurship criteria. On the other hand venture capitalists in general claim that they were not much concerned with whether the entrepreneur is amenable to suggestion and criticism. As can be seen from the table below, the mean of most of the features related to the entrepreneur is high; it indicates the relevance of the above stated factors related to entrepreneurs as seen from the point of venture capitalists.

Table 3.8 Characteristic of entrepreneurs in previous Indian studies

		Mean1995	Mean 2003
1	Integrity	3.78	3.96
2	Capable of sustained effort	3.11	3.62
3	Critical competence vis-vis venture	3.22	3.24
4	Ability to evaluate and react to risk	3.22	3.41
5	Long term vision	3.56	3.74
6	Attention to detail	2.78	3.66
7	Urge to grow	3.56	3.70
8	Commercial orientation	3.33	3.37
9	Amenable to suggestions and criticism	2.56	3.11
10	Articulate in discussing venture	2.22	3.24
11	Compatible personality	2.00	3.41
12	Familiarity with target market	3.22	3.66
13	Demonstrated leadership in the past	2.78	3.41
14	Track record relevant to venture	2.67	2.90
15	Referred by trustworthy source	1.67	3.07
16	VCs familiarity with the entrepreneurs reputation	1.78	3.16
17	Competes against self imposed milestone	2.89	3.16
18	Well thought out strategy to remain ahead of competition	3.33	3.33

Foreign studies- Study of Knight (1994) on VC in US, Canada, East Asia and Europe shows that the top three criteria of an entrepreneurs personality from the point of view of a venture capitalist are the Capability of sustained effort, Ability to evaluate and react to risk and their being Articulate in discussing venture.

The importance of entrepreneur's capability has also been highlighted (Starr & Bygrave, 1991) in terms of their past experience. Using the past experience of an entrepreneur as means to evaluate the success of new ventures has also been

suggested by some researchers (Macmillan et al., 1987). Also Venture capitalist use referral system for finding new proposals (Sagar & Guidotti ,1991).

Table 3.9 Characteristic of entrepreneurs in Indian and Foreign Studies

	Entrepreneurs Personality	**U.S**	**Canada**	**Asia-pacific**	**Europe**	**India 1995**	**India 2003**
1	Capable of sustained effort	3.60	3.56	3.74	3.56	3.11	3.62
2	Ability to evaluate and react to risk	3.34	3.31	3.45	3.57	3.22	3.41
3	Articulate in discussing venture	3.11	2.74	2.77	2.77	2.22	3.24
4	Attention to detail	2.82	2.68	2.77	2.60	2.78	3.66
5	Compatible personality	2.09	1.99	2.19	2.10	2.00	3.41
	Entrepreneurs experience						
6	Familiarity with target market	3.58	3.68	3.57	3.54	3.22	3.66
7	Demonstrated leadership in the past	3.41	3.01	2.98	3.18	2.78	3.41
8	Track record relevant to venture	3.24	2.68	2.92	3.03	2.67	2.90
9	Referred by trustworthy source	2.03	2.10	2.22	2.01	1.67	3.07
10	VCs familiarity with the entrepreneurs reputation	1.83	1.50	1.72	1.55	1.78	3.16

Most studies have shown that VCs evaluate whether senior management is capable enough and has general management expertise and capabilities (Fried & Hisrich, 1994) while some scholars (Wells, 1974) have differentiated among management functional skills: general, marketing, financial, technical and manufacturing skills and experience. Leadership qualities of senior management are also important (Robinson, 1987; Kaplan & Stromberg, 2000).

Indian researchers have demonstrated that VCs consider management's characteristics such as long term vision, integrity, commitment, attention to detail and ability to evaluate and react to risk (Pandey 1996, Kumar & Kaura, 2003). According to some studies apart from qualities of top management VCs prefer a management team that is balanced, i.e. it is composed of people with different functional backgrounds and skills (Muzyka, 1996, Bachher, 2000).

3.8.2 Previous studies on the features of product

Indian studies –The findings of Indian studies on the features of product are shown in table below. Product uniqueness and product developed to the point of functioning prototype were the most important criteria for evaluating the funding of a venture in the study of Pandey (1995). But a later study by Mishra (2003) showed that a high-tech product, a product protected by patent and unique a product as the important features of product/services. He also suggests that the reason for the shift in priorities of product and services has been due to the emphases of government of India in promoting high technology financing. In addition the market share, which the product can achieve, is also evaluated before VC approves funding (Kumar & Kaura, 2003).

Table 3.10 Characteristic of Products/Services in previous Indian studies

	Characteristics of Product/Service	India 1995	India 2003
1	High-tech product	1.67	3.20
2	Proprietary product	2.22	3.24
3	Uniqueness of the product	3.11	3.16
4	Product developed to the point of functioning prototype	3.11	2.61
5	Demonstrated market acceptance of the product	2.22	2.78

International studies on features of product

Study of Knight (1994), shown below, indicates that the ratings of requirements of the features of product and services differ from country to country but the feature of the product/service being high-tech has a low rating in many countries.

Table 3.11 Characteristic of Products/Services in Indian and Foreign Studies

	Characteristic of product or service	U.S	Canada	Asia-pacific	Europe	India 1995	India 2003
1	Proprietary product	3.11	2.28	2.64	2.74	2.22	3.24
2	Demonstrated market acceptance of the product	2.45	2.66	2.81	2.85	2.22	2.78
3	Product developed to the point of functioning prototype	2.38	3.05	2.92	2.97	3.11	2.61
4	High-tech product	2.30	1.25	1.42	1.45	1.67	3.20

Entrepreneurs may have new product/services for which they require funding. As the product/services are new it has to be evaluated in order to gauge suitability for venture funding. Prior studies have established that VCs carefully evaluate the quality of a venture's product or services using criteria's such as:

- Is the product unique or sufficiently differentiated compared to competitors' offerings (Muzyka et al., 1996)?
- Does a functioning prototype of a product exist (MacMillan et al., 1985; 1987)?
- Will a product allow a venture to obtain a competitive advantage due to its apparent superiority over the competitors' products or services (Fried & Hisrich, 1994; Zacharakis & Meyer, 1998)?

3.8.3 Previous studies on the Characteristics of target market

Indian studies - For Indian Venture Capitalist the critical market requirements vary in the previous studies. A high growth rate is seen important as per as Pandey (1995), while there are a number of important factors, which are considered as important by Mishra (2003). Reasons for the changes in the market requirement of the two studies have been attributed the change in business environment due to liberalization and globalization, Mishra (2003).

Table 3.12 Characteristic of Target Market in previous Indian studies

	Characteristics of target market	India 1995	India 2003
1	High market growth rate	3.33	3.91
2	Little threat of competition	2.22	3.45
3	Easy market accessibility	2.11	3.41
4	Market stimulated by the venture	1.78	3.24
5	Large size of market	2.00	3.37
6	Product in the market familiar to VC	1.78	2.94
7	Ability To Create A New Market	2.00	3.20

International studies

Knight (1994), show that a high market growth rate is the top most criteria which venture capitalist consider in the characteristic of market in a proposal. Rating of other features varies from country to country but ability to create a new market gets the lowest importance in different countries.

Table 3.13 Features of Target Market in Indian and Foreign Studies

	Characteristic of Market	U.S	Canada	Asia-pacific	Europe	India 1995	India 2003
1	High market growth rate	3.34	2.86	3.15	3.00	3.33	3.91
2	Market stimulated by the venture	2.43	2.37	2.52	2.36	1.78	3.24
3	Product in the market familiar to VC	2.36	1.81	2.10	2.14	1.78	2.94
4	Little threat of competition	2.37	2.40	2.42	2.23	2.22	3.45
5	Ability To Create A New Market	1.82	1.63	2.17	1.75	2.00	3.20

The ultimate test of the product/service will be in its acceptability by the prospective consumers. Prior studies have revealed that VCs are primarily concerned whether

there is sufficient access to a market targeted by a venture (Tyebjee & Bruno, 1984; whether a venture satisfies an existing market need or stimulates a new need in an existing market (Mac Millan et al., 1985; 1987); whether a market is sufficiently large so that a venture can become profitable; whether a market is growing fast enough (Muzyka et al., 1996).

Prior studies have also established that VCs carefully assess the extent of competitive threat in a sector before they decide to invest. MacMillan et al. (1987) have discovered that two underlying factors have been consistent predictors of VCs' financing decisions, market acceptance of a new product; and the degree of competitive threat. Hisrich & Jankowicz (1990) have pointed out that VCs consider the odds that a venture will be able to hold off competition and whether competitors would immediately target a venture as soon as it enters a market sector. Zacharakis (1995) has determined that VCs take into account the number and relative strength of competitors in a target market as an important criterion while some studies such as Shepherd 1999 have gone a step further to find that VCs examine if requirements necessary for achieving success in the market change slowly or rapidly. Shepherd et al. (2000) have demonstrated that management competence and the degree of competitive rivalry appear to be two most important criteria in VCs' evaluations of new ventures.

Most prior studies of VCs' investment criteria have not mentioned the customer's approval as a separate investment criterion. Instead, prior scholars have demonstrated the role of market acceptance of product (MacMillan et al., 1985; 1987). Some new studies, however, have emphasized that VCs separately analyze the customer's perspective (Silva, 2004), that is, whether customers in a particular sector will be likely to endorse a product and whether senior management has developed a true understanding of their prospective customers

MacMillan et al. (1985; 1987) have first shown that VCs separately analyze a venture's strategy (for instance, its positioning vis-à-vis competitors and long term vision) as one of their investment criteria. Other researchers have also observed VCs using this investment criterion (Muzyka et al., 1999).

3.8.4 Previous studies on the features of deal

Indian studies- Earlier study by Pandey (1995), shows that venture in India do not consider very high returns as a critical in a deal. A return of over 25% is mostly sought by the venture capitalist. This has been attributed to the assumption that if a right entrepreneur, a right product is chosen the returns will follow. Indian entrepreneur have placed considerable importance on the liquidity of investment. A later study by Mishra (2003) gives similar results except that the mostly Venture capitalists require a return of over 100% in 5 years. In both the studies the consideration of having to participate in subsequent round of financing received low ratings.

Table 3.14 Deal considerations in previous Indian studies

	Deal Considerations	India 1995	India 2003
1	Expected return equal to at least 10 times the investment in 5-10 years	1.67	1.00
2	Expected return equal to at least 10 times the investment in 5 years	1.78	1.00
3	Expected return over 25 % in 5 years	2.67	3.16
4	Expected return over 100 % in 5 years	1.89	3.45
5	Venture can be easily made liquid	3.33	3.45
6	Subsequent investment not expected from VC	1.00	2.00
7	VCF will not participate in later rounds of investment	1.00	2.00

International studies

In the international studies Venture capitalist place greater emphasis on returns. As per Knight (994), venture capitalists take a high risk and therefore require a high rate of returns. The importance of return can be seen from the table below. Venture capitalist prefer returns through large capital gains on their investments rather than steady dividends or interest (Wilson, 1986).

Table 3.15 Financial considerations in international studies

	Financial considerations	U.S	Canada	Asia-pacific	Europe	India 1995	India 2003
1	10 times return in 5-10 years	3.42	2.56	2.94	2.86	1.67	1.00
2	Venture can be easily made liquid	3.17	2.39	2.72	2.72	3.33	3.45
3	10 times the return within in 5 years	2.34	1.99	2.10	2.10	1.78	1.00
4	Subsequent investment not expected from VC	1.34	1.92	1.57	1.57	1.00	2.00

Deal quality includes the percentage share offered to VC, price of the share, Returns, Risk and finally option to Exit incase the venture does not perform as per expectation. The quality of deal is an important consideration for VCs. According to prior research, VCs may like a venture, but will invest in it only if they are guaranteed a certain equity stake in a venture at a certain attractive price (Poindexter, 1976; Muzyka et al., 1996). Numerous studies have demonstrated that VCs are extremely concerned whether the projected returns from investment in a venture will be sufficient to justify a venture's funding (Poindexter, 1976).

Scholars have established that in evaluating prospective investments VCs identify various types of risk they may need to tackle with regard to a particular venture. MacMillan et al. (1985) have identified five types of risk typically examined by VCs: Competitive risk, bail out risk, investment risk, management risk and implementation risk.

Prior studies have also shown that VCs look into their conceivable exit choices before they invest (Tyebjee & Bruno, 1984). Since VCs' funds have a limited life span (typically, up to ten years), VCs are concerned whether they will be able to liquidate their investment on time (MacMillan et al., 1985). Thus, VCs may or may not fund a

venture depending on their estimates of the likelihood and timing of certain anticipated exit alternatives (Kaplan & Stromberg, 2000).

3.8.5 Previous Indian studies on regional features

In the Indian context a study was conducted by KPMG and TiE in the year 2007 on the perception of the current status of the key factors required for entrepreneurship development in individual states. The study considered the various regional factors (State specific factors) such as Governance, infrastructure and local environment. Under these categories factors such as Bureaucracy, Fiscal policy, Tax Administration, infrastructure facilities, incubation center, entrepreneur education, mentoring facilities and law and order situation. The results have been presented in the table below.

Figure 3.16 Comparison of regional features in Uttar Pradesh with rest of India

	Parameter	Uttar Pradesh	Pan India
1	Infrastructure	3.81	3.36
2	Manpower	3.74	3.09
3	Finance	3.76	2.94
4	Local environment and ecosystem	3.95	2.95
5	Governance issues	3.78	2.93
6	Regulatory issues	3.75	3.05
7	Weighted average	3.80	3.10

In the study of KPMG-TiE, Uttar Pradesh Scored well, sometimes even higher than the national average. The high scores for the state of Uttar Pradesh has been attributed by the study due to the following:

1. Perception and expectations of the respondents might be conditioned by their experiences, in their respective states, and also their expectations thereof. Research suggested that the expectations of entrepreneurs vary according to the maturity levels of their ecosystems, a more evolved ecosystem like Gujarat or Delhi has the challenge of meeting much higher expectations compared to those of a more nascent entrepreneurial ecosystem like Uttar Pradesh.

2. The score for Uttar Pradesh can be attributed to a respondent base primarily consisting of NOIDA and Ghaziabad both of which are in the national capital region. The high score in Uttar Pradesh could be attributed to the 'NCR-effect', where a large chunk of development is moving from Delhi to the National Capital Region (NCR).

Previous Foreign studies on regional features

The importance of physical distance for information gathering is also highlighted by Coval & Moskowitz (2001). Also Tian (2006) provides evidence that entrepreneurial firms located closer to their investing venture capitalists outperform other entrepreneurial firms. The role of spatial and network proximity for financial intermediaries has attracted significant attention in finance literature (Clark & O'Connor 1997).

3.8.6 Country –Wise differences in the importance of criteria in previous studies

The importance of the various evaluation criteria used by Venture Capitalist in different countries has been shown in the table below. The table below highlights the differences in the preferences of venture capitalist with regard to their importance of the evaluation criteria.

In USA, Singapore and Japan the top criteria are sustained intense effort, Familiar with target market, Evaluates and reacts to risk, demonstrated leadership and At least 10 times returns in 5-10 years. But none of these features appears in the top criteria in India. Both the studies have shown integrity as the most important criteria. The differences have been explained in terms of economic environment, entrepreneurial development and financing mechanism. The USA, Singapore and Japan are more economically developed and open economies; they use advanced and new technologies and have a highly competitive business environment. Therefore for a profitable operation of business, an entrepreneur needs to have a clear market focus, hard work and risk handling ability. Further a long history of sound business practices and entrepreneurial development in a free environment has provided the entrepreneurs with a sense of commercial orientation: commitment and integrity in their operations

Table 3.17 Five most frequently rated essential criteria

		USA	Singapore	Japan	India, 1995	India, 2003
1	Sustained intense effort	1	1	2	*	*
2	Familiar with target market	2	2	1	*	*
3	Evaluates and reacts to risk	5	5	3	*	*
4	Demonstrated leadership	3	2		*	*
5	At least 10 times returns in 5-10 years	3	*	*	*	*
6	High market growth rate	*	2	4	5	2
7	Creation of new market	*	*	5	*	*
8	Liquid investment	*	*	5	*	*
9	Integrity	*	*	*	1	1
10	Managerial skills of venture	*	*	*	2	
11	Functioning proto type	*	5	*	*	*
12	Urge to grow	*	*	*	3	4
13	Long-term vision	*	*	*	4	3
14	Commercial orientation	*	*	*	5	*
15	Attention to detail	*	*	*	*	5

Asterisk (*) indicates that the factor is not amongst the top 5 criteria.

In developing countries such as India the entrepreneurs are not fully developed. They also lack sound business practices. Also because of the government control over the business, entrepreneur in developing countries perhaps have not been able to develop a commercial orientation and commitment towards their enterprises. Since most entrepreneurs have not operated in real environment they also lack the skills to develop appropriate strategies to face competition.

3.9 Previous studies on the role of venture capital in economic development

Though such studies are not available in the Indian context, but numerous international studies have established the developmental role of venture capital. Kortum & Lerner (2000) estimated the impact of venture capital on the ratio of patents to R&D spending. In a simple model, they show results that suggest that venture funding does have a strong positive impact on innovation. Further more the estimated coefficients vary according to the techniques employed, but on average, a dollar of venture capital appears to be three to four times more potent in stimulating patenting than a dollar of traditional corporate R&D. The estimates therefore suggest that venture capital, even though it averaged less than 3 percent of corporate R&D from 1983 to 1992, is responsible for perhaps 10 percent of U.S. industrial innovations in this decade.

The overall economic impact of Venture Capital has been highlighted by study of BVCA and Bannock Consulting (2006). Study shows that

1. VCT backed companies contribute significantly to the UK economy. VCT backed companies create jobs at a considerably faster rate than other more established firms. Over the five years to 2001/2,the number of people employed by VCT backed companies increased by an average of 32% p.a., against a national private sector employment growth rate of just under 1.5%. VCT backed companies increased their staff levels at a rate around 31/2times that of FTSE Small Cap companies.
2. VCT backed companies grow faster. Over the five years to 2001/2, on average VCT backed companies' sales rose by 38% p.a., more than three times the growth rate achieved by FTSE Small Cap companies. Exports grew by 62% p.a., compared with a national growth rate of just 2.9% and investment rose by 23% p.a., compared with a national increase of 2.3%. 85% of companies said that without VCT funding the business would not have existed at all or would have developed less rapidly.

A recent study by the National Venture Capital Association (NVCA) documents the scale and economic impact of 30 years of VC investment in the United States. Over the three decades 1970-2000, American venture capitalists invested no less than $273.3 billion into companies in all 50 states. These firms now employ 7.6 million

people and generate over $1.3 trillion in annual sales revenue, representing 5.9% and 13.1% of the respective U.S. national totals. The NVCA study finds that on average every $36,000 in VC investment creates one new job. Similarly, A study by the European Private Equity and Venture Capital Association (EVCA) [www.evca.com], entitled "The Economic Impact of Venture Capital in Europe," found that VC-backed European companies generated significantly higher growth rates in sales, research spending, exports and job creation during the 1990-1995 period than did otherwise comparable non-VC-backed companies. Recent updates of this study find that European VCs invested € 34.9 billion ($31.4 billion) in over 10,400 companies in 2000 and achieved similarly impressive results.

3.10 Previous studies on problems faced by entrepreneurs in raising capital

Problems faced by entrepreneurs in raising capital were first highlighted by the MacMillan Committee Report (1931). Since then numerous researches have been undertaken to find the reason for the problems faced by entrepreneurs in raising capital. Of particular interest has been the problems faced by small enterprises in raising capital.

A study by Cull, et. al., 2005, highlights the problems of financing in micro and small enterprises. The study shows that 64 percent of micro enterprises do not get external finance.

Table 3.18 Principal Sources of External Finance

Size	Informal	Banks	External equity	Long-term credit	No external finance
Micro	14.4	9.5	3.2	8.9	64.0
Small	9.4	17.6	3.0	15.4	54.6
Medium	4.6	25.2	2.8	16.6	50.8
Large	3.6	29.5	4.1	17.0	45.9
Very large	2.7	31.5	2.9	14.7	48.1

Source: Cull, et. al., 2005

The relative and absolute importance of small enterprises has grown enormously over the last twenty years; this real growth has been matched by appreciation of their role.

What were previously regarded as temporary stepping-stones to real business are now recognized as one of the most vital contributors to incomes and to development; however they may be defined (Malcolm Harper, 1998).

The table below depicts the position of small and medium enterprises (SME); it shows that they have access to lesser bank credit than larger enterprises.

Table 3.19 Evidence of the SME Finance Gap

Firms	Small/Micro	Medium	Large	Very large
% age With bank loans	20	40	52	55

Hallward and Stewart, 2005.

As the above table shows, the problem is not unique to India. It is more typical of developing rather than developed countries due to the greater risk-aversion of household depositors in poorer countries. Yet even developed countries report this problem. A paper by the British government's Small Business Service notes that, "While most businesses seeking to finance investment, innovation and growth are well-served by a variety of private sector sources of finance, lenders continue to face uncertainty in assessing credit risk when lending to SMEs and often rely on collateral provided by the borrower to reduce their risk exposure. This can create difficulties for entrepreneurs who do not have suitable assets to offer as security. In consequence, smaller firms in most countries tend to rely more on informal sources of finance

3.11 Previous studies on problems faced by entrepreneurs in raising Venture Capital

Numerous studies have identified control issues and inexperienced management as problems faced by entrepreneurs in raising capital. A study by the Australian Venture Capital Association on 'Early Stage Enterprises (ESEs), states that many "ESEs find it difficult to access sufficient capital to grow, due to difficulty in attracting formal venture capital, as such investors have little incentive to commit high risk capital. This creates a funding gap. Studies have identifies the following obstacles faced by entrepreneurs in raising venture capital:

1. Transaction costs – the costs to an investor of appraising the risks and returns from an investment tend to be fixed and high relative to the size of the investment.
2. Transaction size – venture capital investors typically require a minimum transaction size, which is often higher than the average ESE fund raising.
3. High risk - higher for early stage (and particularly pre-revenue) companies – because the management team or the ESE's product and market may be unproven.
4. Lack of exit options – there is no secondary market for trading in smaller firms' shares.

A study conducted in India by Taneja (2002), identified the following problem associated with venture capitalist. Venture capitalist in India are; Insensitive to early stage projects, bankers with little practical knowledge, investing only in successful expanding projects, taking a long time in negotiation, investing only in large projects, requiring business plans which is difficult for entrepreneurs to make and are a costly source of funding.

In India the lack of funding in the seed and early stage investment is relatively higher as compared to countries like china, Israel, UK and USA, as can be seen from the table below.

Table 3.20 Seed and Early Stage Investment – Selected Countries, 2004

	China	India	Israel	UK	USA
% of total risk capital invested in seed and early-stage firms	12.5	6.9	32	39	29

Sources: China: Zero2ipo-CVCAnnual Report 2005; India: TSJ Media; Israel, UK, US: Global Private Equity: Venture Capital Insights Report 2004-2005, Ernst & Young. The percentages are not strictly comparable owing to different definitions and should be used as qualitative indicators.

Many entrepreneurs either do not seek or decline venture capital funding because of a fear of losing control of their business or new product ideas. This fear underlies the use of the term "vulture capital" (David, Kris, & Michaela, 2004). The fear of Venture Capitalist controlling the firm is also highlighted by Kirilenko (2001).

Negotiations with VC take a long time. Before the closing of the investment and the design of the financial contracts, however, the VCs spend a significant amount of time and effort evaluating and screening the investment opportunity Kaplan and Stromberg (2000)

3.12 Previous studies on assistance provided by venture capitalist

The value added role that can be played by venture capital is discussed earlier in section 3.2 of this chapter. In this section the findings of various studies on firms that received the venture capital is discussed. In a study of BVCA & Bannock Consulting (2006), nearly 80% of the companies felt that their VCT managers had made a major contribution other than the provision of finance. Contributions cited by VCT backed companies included, VCT managers being used to provide financial advice, guidance on strategic matters and for management recruitment purposes as well as with their contacts and market information. Over half of the firms said that with VCT backing their level of investment was higher than would have otherwise been possible.

Studies have highlighted the numerous role of played by a venture capitalist. Instead of monitoring the day-to-day operations of a company VCs intensively monitor the managers of businesses in which they invest (Gorman & Sahlman 1989). When there is a gap in the management team, VC increases its involvement in the affairs of the investee company (Lerner 1995). Acting through the board of directors, VCs also have the power to hire and fire the senior management of their portfolio companies

3.13 Limitations of venture capital

The overall role of VC in financing and nurturing start-ups has its own advantages and benefits. But in spite of this there exist certain important limitations in VCF. Venture funds only back a tiny fraction of the technology-oriented businesses begun each year. Historically only 1 in 100 of those firms that submit business plans to venture organizations have been funded (Fenn, Liang, & Prowse 1995). Apart from

this VC solution to the problem of financing innovation has other limitations. Firstly VC tends to focus only on a few sectors at a time and they make investment with a minimum size. This minimum size that is too large for many startups. Secondly, good performance of the VC sector requires a thick market in small and new firm stocks (such as NASDAQ) in order to provide an exit strategy for early stage investors (Hall 2005).

Bygrave & Timmons (1985) studied the effect of the over-the-counter activity on the flow of venture capital funds in the U.S. They found that the health of the over-the-counter market, measured by both the number of IPO's and the NASDAQ Index, had a strong influence on the amount of funds to venture capital firms. In contrast, the results did not show a strong influence of the New York Stock Exchange market on those flows (Sagari & Guidotti, 1991). Thus venture capital activity depends on the general conditions of the equity market and in particular the market for new securities.

Chapter 4

Research Methodology

This chapter starts with the identification of the problem, the research gap and the scope of the study and then puts forth the various steps through which this study has been carried out.

4.1 Identification of the problem

Firstly, as shown in previous chapters, Uttar Pradesh is an economically backward state. Promoting industrialization has been identified as a means to increase the prosperity of the state (Uttar Pradesh Development Report, 2007). Furthermore it has been shown that industrialization would require large amount of funds and that raising funds for business ventures in general poses problems to entrepreneurs.

Secondly, though the concept of Venture capital is new for the state of Uttar Pradesh but as discussed in the literature review (mainly, section 3.1), venture capital through funding and providing value added services could help in economic development of a region.

Thirdly, as discussed earlier (section 1.6), literature related to the evolution of Venture capital highlights the peculiar problems it faced in different parts of the world and the pivotal steps that led to its establishment

To sum up, there is a need of capital in Uttar Pradesh, venture capital can play a developmental role and there are problems faced in venture capital. In view of the above points this study looks into the prospects and problems of venture capital in the state of Uttar Pradesh

4.2 Research Gap

As detailed in literature the review, a number of researches have been carried out on the different aspects of venture capital. These researches have mainly focused on the

evaluation criteria used by venture capitalist, the issues involved in venture capital funding, problems faced by entrepreneurs in raising capital and the developmental role of venture capital.

Previous researches have established that the issues in venture capital funding and evaluation criteria used by Venture Capitalists differs from one place to another. They have shown that legal or cultural differences can change the way players in the market behave (Cumming & MacIntosh, 2002; Black & Gilson, 1998). As differences in economic and social structures and legal and fiscal environments lead to variations in the importance of criteria and issues in Venture Capital Funding a research on the Problems and Prospects of venture capital market in Uttar Pradesh may give insights that are different from the previous foreign and Indian researches.

Black & Gilson (1998) illustrated how differences in capital market organization and regulation affects the development and behavior of the venture capital industry. Thus studying a nascent venture capital market such as Uttar Pradesh might also give more general knowledge about how venture capital markets are created and in doing so what are the difficulties and opportunities.

As most of the researches on venture capital have been carried out abroad, consequently for India in general and Uttar Pradesh in particular there is a lack of earlier researches. Due to a lack of prior research on venture capital in Uttar Pradesh there exits a research gap, which can be fulfilled by this study.

4.3 Scope of the study

The following aspects related to the problems and prospects of Venture Capital in Uttar Pradesh are covered:

1. Venture capitalists have certain evaluation criteria, which they use while judging the suitability of an investment proposal. This study tries to find how far investment proposals from Uttar Pradesh fulfill the investment criteria laid down by a venture capitalist.
2. This study also tries to find out how venture capital can help in making Uttar Pradesh a more economically developed state

3. In view of its developmental role, governments in many countries have played a direct and indirect role in promoting venture capital. This research studies the role, which the government of Uttar Pradesh can play in promoting venture capital. Yet, as we still know very little about what government policies can help create active venture capital markets, this study contributes a step towards filling this gap.
4. The effect of syndication in promoting venture capital investments in Uttar Pradesh is studied.
5. Entrepreneurs face problems in raising capital (a funding gap exist for new and small entrepreneurs, as discussed in literature review). The problems faced by entrepreneurs in raising capital in Uttar Pradesh are studied.
6. The scope of study also covers the problems faced by entrepreneurs in raising venture capital.
7. Entrepreneurs expect financial and non-financial help from venture capitalist. The expectations of entrepreneurs in Uttar Pradesh from venture capital are also studied.
8. The sector-wise and stage-wise interest of venture capitalist is also studied for Uttar Pradesh

The following aspect of study are not covered

1. Empirical analysis of the above mentioned points in the scope of study have not been performed.
2. All the issues in venture capital funding have not been studied.

4.4 Objectives of the study

Previous studies conducted for Uttar Pradesh have highlighted the reasons for its industrial backwardness and have also identified some problems being faced by entrepreneurs in raising capital. This study tries to highlight problems of Venture Capital Financing in Uttar Pradesh and its prospects in terms of how it can open up new avenues for growth and thereby aid in the economic growth of Uttar Pradesh. The objective of the study is to find the perspectives of venture capitalist and entrepreneurs as related to the problems and prospects of venture capital in Uttar Pradesh.

The perspectives of venture capitalist are studied with regards to the following problems and prospects of Venture Capital in Uttar Pradesh:

1. To study the importance of the various investment criteria used in evaluation of proposals such as attributes of entrepreneurs, products and services, target market, deal and region and to ascertain how far the proposals in Uttar Pradesh meets these criteria.
2. To decipher the role which ventures capital, can play to make Uttar Pradesh a more economically developed state.
3. To probe the role which government of Uttar Pradesh can undertake in order to promote venture capital in the state.
4. To find out the sector-wise and stage-wise areas of interest in Uttar Pradesh.

The perspective of entrepreneurs of Uttar Pradesh is studied with regards to the following problems and prospects of Venture Capital in Uttar Pradesh:

1. To study the problems faced in raising Equity, Debt and Venture Capital.
2. To study the importance of the various types of help sought from a venture capitalist.

4.5 Hypotheses development

Hypothesis 1(Evaluation criteria)

Most of the prior studies of VCs' (Venture Capitalist) decision making (reported in Table, 3.5, 3.6 and 3.7) have focused on extracting from interviews and surveys of VCs a list of criteria VCs employ to evaluate ventures for a possible financing. The decision to invest depends on a number of criteria. To find out if investment proposals in Uttar Pradesh fulfill the criteria of venture capitalist we the following **null Hypotheses**:

Characteristics of entrepreneurs

Overall Significance test

$H1_{a0}$: **There is no difference between the characteristics of entrepreneurs in Uttar Pradesh and the characteristics of entrepreneurs required by a venture capitalist.**

Significance test for differences in individual variables

$H1_{a1o}$: There is no difference in the leadership qualities of entrepreneurs in Uttar Pradesh and the leadership qualities required by a venture capitalist.

$H1_{a2o}$: There is no difference in the integrity and commitment of entrepreneurs in Uttar Pradesh and the integrity and commitment as required by a venture capitalist.

$H1_{a3o}$: There is no difference in the long-term vision of entrepreneurs in Uttar Pradesh and the long-term vision as required by a venture capitalist.

$H1_{a4o}$: There is no difference in the commercial orientation of entrepreneurs in Uttar Pradesh and the commercial orientation as required by a venture capitalist.

$H1_{a5o}$: There is no difference in the technical expertise of entrepreneurs in Uttar Pradesh and the technical expertise as required by a venture capitalist.

$H1_{a6o}$: There is no difference in the financial expertise of entrepreneurs in Uttar Pradesh and the financial expertise required by a venture capitalist.

$H1_{a7o}$: There is no difference in the market knowledge of entrepreneurs in Uttar Pradesh and the market knowledge as required by a venture capitalist.

$H1_{a8o}$: There is no difference in the team handling ability of entrepreneurs in Uttar Pradesh and the team handling ability required by a venture capitalist.

Characteristics of products

Overall Significance test

$H1_{bo}$: **There is no difference between the characteristics of products and services in proposal from Uttar Pradesh and the characteristics of products and services required by a venture capitalist.**

Significance test for differences in individual variables

$H1_{b1o}$: The presence of uniqueness in product and services in investment proposals from Uttar Pradesh is as per the requirement of Venture Capitalist.

$H1_{b2o}$: The presence of product prototype in investment proposals from Uttar Pradesh is as per the requirement of Venture Capitalist.

$H1_{b3o}$: The presence of patent in investment proposals from Uttar Pradesh is as per the requirement of Venture Capitalist.

$H1_{b4o}$: The presence of superiority in products and services in investment proposals from Uttar Pradesh is as per the requirement of Venture Capitalist.

Characteristics of target market

Overall Significance test

$H1_{co}$: **There is no difference between the characteristics of target market in proposal from Uttar Pradesh and the target market characteristics required by a venture capitalist.**

Significance test for differences in individual variables

$H1_{c1o}$: There is no difference in the market size in proposal from Uttar Pradesh and the market size as required by a venture capitalist.

$H1_{c2o}$: There is no difference in the market growth rate in proposal from Uttar Pradesh and the market growth rate as required by a venture capitalist.

$H1_{c3o}$: There is no difference in the market competition in proposal from Uttar Pradesh and the market competition as required by a venture capitalist.

Features of deal

Overall Significance test

$H1_{do}$: **There is no difference between the features of deal in proposals from Uttar Pradesh and the features of deal required by a venture capitalist.**

Significance test for differences in individual variables

$H1_{d1o}$: The percentage share of equity (ownership) offered to venture capitalist in proposals from Uttar Pradesh is as per the requirement of venture capitalist.

$H1_{d2o}$: The price of equity being offered to venture capitalist in proposals from Uttar Pradesh is as per the requirement of venture capitalist.

$H1_{d3o}$: The level of risk in proposals from Uttar Pradesh is as per the acceptance level of venture capitalist.

$H1_{d4o}$: The returns in proposals from Uttar Pradesh are as per the requirement of venture capitalist.

$H1_{d5o}$: The willingness of other venture capitalist to participate in proposals from Uttar Pradesh is as per the requirement of venture capitalist.

$H1_{d6o}$: The provisions in contracts in proposals from Uttar Pradesh are as per the requirement of venture capitalist.

$H1_{d7o}$: The ease of exit in proposals from Uttar Pradesh is as per the requirement of venture capitalist.

Features of region

Overall Significance test

$H1_{eo}$: **There is no difference between the regional features of Uttar Pradesh and the regional features required by a venture capitalist.**

Significance test for differences in individual variables

$H1_{e1o}$: There is no difference in the distance from office of venture capitalist in Uttar Pradesh and the distance from office as required by a venture capitalist.

$H1_{e2o}$: The clarity of rules and regulations in Uttar Pradesh is as per the requirement of venture capitalists.

$H1_{e3o}$: The stability of policies in Uttar Pradesh is as per the requirement of venture capitalists.

$H1_{e4o}$: The infrastructure facilities in Uttar Pradesh are as per the requirement of venture capitalists.

$H1_{e5o}$: The availability of trained manpower in Uttar Pradesh is as per the requirement of venture capitalists.

$H1_{e6o}$: The law and order in Uttar Pradesh is as per the requirement of venture capitalists.

Data for testing of the above Hypotheses was obtained from questions no. 1 and 2 of the questionnaire for Venture Capitalist.

Hypotheses 2 and 3 (Role of venture capital and government)

As discussed earlier in literature review, recognizing the potential role which venture capital has played in USA in innovation, job creation and economic growth, governments in many parts of the world have taken a number of initiatives to promote venture capital investments in their regions (refer section 3.1 and 3.5).To find out the role of venture capital and government for the state of Uttar Pradesh we have **null Hypotheses**:

$H2_{ao}$: Venture capital funding will make no difference in promoting economic development in Uttar Pradesh.

$H2_{bo}$: Venture capital funding will make no difference in making industrial unit in Uttar Pradesh more competitive.

$H3_o$: Government cannot promote venture capital funding in Uttar Pradesh.

Data for testing of the above Hypotheses was obtained from questions 4, 5 and 6 of the questionnaire for Venture Capitalist

Hypothesis 4 (Syndication)

As discussed in literature review (section 3.4.5)syndication of venture capital funding has a number of advantages. In this study we try to find the perspectives of venture

capital with regards to the various benefits of syndication in promoting venture capital invetsments in Uttar Pradesh.Therefore, Null Hypothesis

$H4_o$: Syndication cannot promote venture capital funding in Uttar Pradesh.

Data for testing of the above Hypothesis was obtained from question no.7 of the questionnaire for Venture Capitalist.

Hypothesis 5 (Problems in equity and debt capital)

Debt and Equity are the two most commonly used methods for raising capital for business ventures (Berger & Udell, 1998). To find the perspectives of entrepreneur in Uttar Pradesh with regards to the problems faced in raising equity and debt capital we have **null hypotheses:**

$H5_{ao}$: Entrepreneurs in Uttar Pradesh do not face problems in raising equity capital.

$H5_{bo}$: Entrepreneurs in Uttar Pradesh do not face problems in raising debt capital.

$H5_{co}$: Entrepreneurs in Uttar Pradesh face no significant difference between problems in raising equity capital and problems in raising debt capital.

$H5_{d1o}$: The problems faced in raising equity capital does not differ age- wise.

$H5_{d2o}$: The problems faced in raising debt capital does not differ age- wise.

$H5_{e1o}$: The problems faced in raising equity capital does not differ location wise.

$H5_{e2o}$: The problems faced in raising debt capital does not differ location wise.

$H5_{f1o}$: Problems faced in raising equity capital does not differ gender wise.

$H5_{f2o}$: Problems faced in raising debt capital does not differ gender wise.

Data for testing of the above Hypotheses was obtained from question 2 (part a and b) of the questionnaire for Entrepreneurs of Uttar Pradesh.

Hypothesis 6 (Problems in venture capital)

This study tries to find out the perspectives of entrepreneurs from Uttar Pradesh with regards to the problems faced in raising venture capital. Therefore, Null Hypotheses

$H6_{ao}$: Entrepreneurs in Uttar Pradesh do not face problems in raising venture capital.

$H6_{bo}$: For the entrepreneurs of Uttar Pradesh the problems faced in raising venture capital does not differ age-wise.

$H6_{co}$: For the entrepreneurs of Uttar Pradesh the problems faced in raising venture capital does not differ location-wise.

$H6_{do}$: For the entrepreneurs of Uttar Pradesh the problems faced in raising venture capital does not differ gender-wise.

Data for testing of the above Hypotheses was obtained from question 4 of the questionnaire for entrepreneurs of Uttar Pradesh.

Hypothesis 7 (Assistance of venture capitalist)

Apart from financing, venture capitalists also provide a number of value added services (Gorman & Sahlman, 1989). This study tries to find out the perspectives of entrepreneurs of Uttar Pradesh with regards to the assistance expected from venture capitalist. Therefore, Null hypotheses

$H7_{ao}$: Entrepreneurs in Uttar Pradesh do not expect non-financial assistance from venture capitalist.

$H7_{bo}$: For the entrepreneurs of Uttar Pradesh the assistance expected from venture capitalist does not differ age-wise.

$H7_{co}$: For the entrepreneurs of Uttar Pradesh the assistance expected from venture capitalist does not differ location-wise.

$H7_{do}$: For the entrepreneurs of Uttar Pradesh the assistance expected from venture capitalist does not differ gender-wise

Data for testing of the above Hypotheses was obtained from question 5 of the questionnaire for Entrepreneurs of Uttar Pradesh.

In all 54 hypotheses were tested, 37 from the questionnaire of venture capitalist and 17 from the questionnaire of entrepreneurs of Uttar Pradesh.

4.6 Research Design

This research study is descriptive in nature. Descriptive studies are concerned with specific descriptions, with narration of facts and characteristics concerning individuals, groups or situations. This descriptive study has been conducted with venture capitalist and entrepreneurs in Uttar Pradesh.

Lack of prior research work on Venture Capital in Uttar Pradesh prompted the use of an exploratory study design. But in view of the previous researches (related to this

study which have been carried out in India and abroad, refer literature review) this study is descriptive.

4.7 Sources of data

For the purpose of conducting the present study relevant data and important information have been collected from both primary and secondary sources.

4.7.1 Secondary data

Under this category various sources of data are used, Reserve Bank of India, Uttar Pradesh Government's Statistical Department, Indian Venture Capital Association, Indian Industries Association, Ministry of Micro, Small and Medium Enterprises, Confederation of Monitoring of Indian Economy were the important sources of statistical data.

For the purpose of literature review and gaining insights on the research topic the researcher consulted books and similar studies carried out in India and abroad on venture capital.

4.7.2 Primary sources

Primary data were the main source of study. There are two sources of primary data, venture capitalist in India and entrepreneurs of Uttar Pradesh.

4.8 Populations defined

The list of entrepreneur in Uttar Pradesh came from the entrepreneurs registered with Indian industry association (IIA). IIA is primarily composed of members from the state of Uttar Pradesh. Past researches have also used such sate specific industrial association to collected data on entrepreneurs (Barriera, 2004). It is assumed that only companies, which are active, would register themselves in such organization.

The list of venture capitalist came from the Indian Venture Capital and Private Equity association, New Delhi (Details of Indian Industry Association and Indian Venture Capital Association are enclosed in the appendix).

4.9 Sample size determination

Venture capitalist: In view of the limited number of venture capitalist in India, all the venture capitalist who are members of the Indian Venture capitalist and Private Equity Association (IVCA) were selected (Except venture capital funds that are state specific, as they entertain investment proposals only from their respective states). Previous studies on venture capital such as Mishra (2003) have also used the list of IVCA to identify the venture capitalist.

Entrepreneurs: As the numbers of entrepreneurs in Uttar Pradesh was large, a sample size was determined using the method suggested by Nargundkar (2008). For interval scaled variables the following formula given by Nargundkar (2008) is used

$$N=(ZS/E)^2$$

Where, N= Sample Size

Z= Confidence Level

S= Population standard deviation for the variable which we are trying to study.

E= Tolerable error, expressed in the same units as the variables being measured.

The researcher decides the values of Z, S and E. In our case we have taken the values as follows,

1.**The value of Z** - At 95% confidence level, Z=1.96

2.**The value of S** - Is estimated by diving the range of the scale by the 6,i.e.S=Range/6. The logic of using 6 is that range equals 6 standard deviations for most of the variables. Therefore, range when divided by 6, should give a fairly good estimate of the standard deviation. In our questionnaire we have used a 5-point scale, the maximum value being 5 and minimum value being 1, therefore range is 4(5-1=4). Therefore, S=4/6

3.**Value of e** is taken as 0.07. Substituting the values of Z, S, and E in the above formula we find the sample size to be 348 (Approximately). In this study we have taken a sample size of **386**, to be on safer side.

4.10 Sampling method

For entrepreneurs in Uttar Pradesh-

Systematic sampling was used to select the names of the respondent. The database of Indian industry association (IIA) shows the listing of its member's district wise. From

each district of Uttar Pradesh the respondent entrepreneurs were chosen using skip interval. Systematic sampling enables the representation of the entire population and is simple to administer (Burns & Bush, 2007). In our study systematic sampling enabled a proportional representation of entrepreneurs from each district of Uttar Pradesh.

4.11 Survey instrument

Since no public data was available on the research topic, necessary data for this study had to be first collected. For collection of data, survey was conducted on the venture capitalists in India and entrepreneurs of Uttar Pradesh. A survey involves collection of data from a large number of respondents using a pre-designed questionnaire. The survey research methodology is appropriate for this research project as it helps to make broad generalizations from a sample and these generalizations in turn would facilitate drawing inferences through hypotheses. By reviewing thoroughly relevant research related to the problems and prospects of venture capital and identifying the commonalities in these literatures the questionnaire were prepared to test the various hypotheses. Many previous studies on venture capital have also used surveys research methodology (refer table 3.5, 3.6 and 3.7). Two different sets of questionnaires have been employed one for the venture capitalist and the second one for entrepreneurs.

4.11.1 Process of Questionnaire Development

Questionnaire was developed following the, procedures suggested by Churchill (1979); Gerbing & Anderson (1988). A three-stage process illustrates how the questionnaire items were developed before conducting the final survey. Each process is detailed below:

Stage 1: Literature search

The questions for entrepreneurs and venture capitalist were based on the findings of previous researches and studies. (Refer table 3.4, 3.5 and 3.6 for the summary of findings in previous studies in India and abroad). After the problems were identified an extensive review of literature was done for identifying the scales for measures relevant to this study.

Stage 2: In depth interviews

In depth interviews with 20 entrepreneurs and 3 venture capitalists were conducted to gain broader knowledge about the issue involved and to evaluate the content validity

and wordings of individual scale items. Content validity is concerned with the adequacy with which the domain of the characteristic is captured by the measure (Churchill 1999).

Stage 3: Pre-test

Items pertaining to a questionnaire were pre-tested, including layout, length, response format, sequence, meaning of words and question difficulty (Hunt, Sparkman & Wilcox 1982). After completing the questionnaires, each respondent was asked to comment whether the instructions were precise and whether any ambiguity or difficulty occurred in answering any of the questions. According to the respondents, a few questions needed better phrasing. The final versions were generated after minor modifications to the suggested questions.

4.11.2 Structure of questionnaire

Some previous studies have employed structured interviews or questionnaires for data collection (section 3.4, 3.5 and 3.6). For this study a structured, undisguised questionnaire was also used. Two different sets of questionnaires were administered through mail to the venture capitalist and the entrepreneurs of Uttar Pradesh. Both dichotomous and five-point scales were used.

The responses to the dichotomous close-ended question were in the form on Yes/No. For more information on the attributes under study a five –point scaled responses is used, where the respondent venture capitalists and entrepreneurs were asked to rate their perspectives with regards to the various attributes related to the problems and prospects of venture capital in Uttar Pradesh. For instance venture capitalist were asked to rate the criteria in evaluating an investment proposal on a five-point scale.

Structured questionnaire was decided for this study upon realizing that the participants only had a limited amount of time available for the interviews. By using a structured questionnaire it was concluded that it would aid in keeping to the tight time schedule as well as assuring that all the questions were asked.

Apart from the demographic data, the questionnaires for venture capitalist had 8 questions running into 7 pages while the questionnaire that was for the entrepreneur

had 5 questions running into 5 pages. A copy of both the questionnaires is enclosed in the annexure.

4.11.3 Data collection

The three most common methods of data collection are mail surveys, face-to-face interviews and telephone surveys, and each of these has inherent advantages and disadvantages. Several factors were taken into account while choosing the mail survey method for this research. Though a mail survey is a less expensive method than telephone interview and personal interview, but a low response rate is the most obvious disadvantage of mail survey (Burns & Bush, 2007).

For Questionnaire no.1 (the venture capitalist), questions were sent through mail and Internet and later on at a prefixed date and time response was sought through Internet and telephone. But for, Questionnaire no.2 (the entrepreneur), in view of the large and geographically dispersed sample size the questionnaire was mailed.

4.11.4 Techniques to Increase Response Rate

Total Design Method (TDM), as described by Dilman (1978), is used for implementing this survey. The theory underlying the TDM is social exchange, which suggests the likelihood that individuals will respond to a survey questionnaire is a function of how much effort is required to respond, and what they feel they are likely to get in exchange for completing the questionnaire.

1. Along with the questionnaires a personalized covering letter was also sent to persuade the venture capitalists.
2. The questionnaires were designed and pre-tested to ensure that it took approximately 8-10 minutes to give the response.
3. The entrepreneurs and venture capitalists were motivated to respond as the survey was related to an area of their interest. They were further motivated to respond as all respondents could get a copy of the results which can be used by them.
4. The chapter chairpersons of the various districts of the Indian Industry Association (IIA) were personally met/called up. They were persuaded to help in the survey by requesting the respondent members (entrepreneurs) in their respective district to fill the questionnaire.

4.11.5 Mailing Process

There were altogether three mailings administered to the VCs and the entrepreneurs in the survey of this study. First, mailing consisted of a covering letter and the questionnaire to 45 venture capitalist and 993 members of the Indian Industries Association. A week later a reminder cards were sent as suggested by Dilman (1978). Four weeks later, the final third mailing was sent to non-respondents.

Out 45 Venture Capitalist 16 responded, this translates into a response rate of 36 %. The total number of entrepreneurs firms, which responded, was 352. In order to persuade responses from entrepreneurs they were contracted by telephone and 34 more responses were sought making the total number of response at 386. This translates into a response rate of 39%.

The above response rate can be considered acceptable given that management time is a critically scarce resource (Gaedeke & Tootelian (1976) forecasted a 20 percent response rate from top executives).

4.11.5 Response Pattern

The profile of respondents in terms of their location and age are given in the following sections below

Location and age of venture capitalists

As can be seen from the table and graph given below the maximum numbers of respondents were from Mumbai, which was followed by the city of Bangalore. The maximum numbers of venture capitalist were between 6 to 10 years old.

Table 4.1 Location of Venture Capitalist

Location	No. Of venture capitalist
Bangalore	6
Chennai	1
Delhi	2
Mumbai	7

Figure 4.1 Location of Venture Capitalist

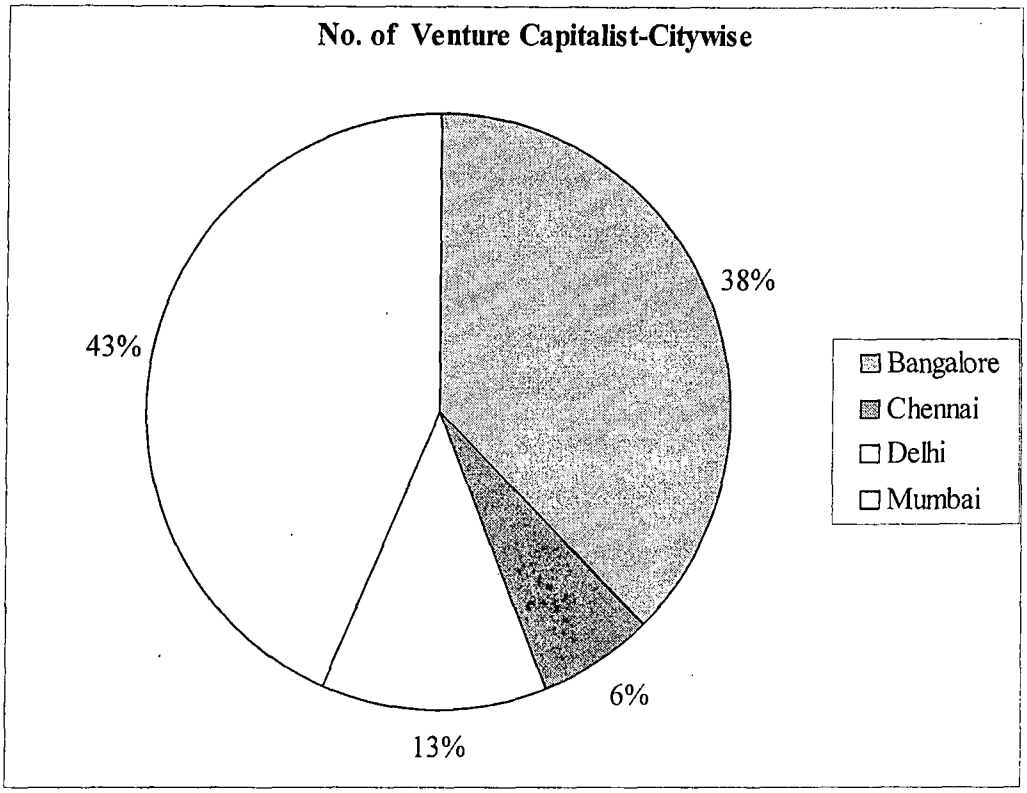
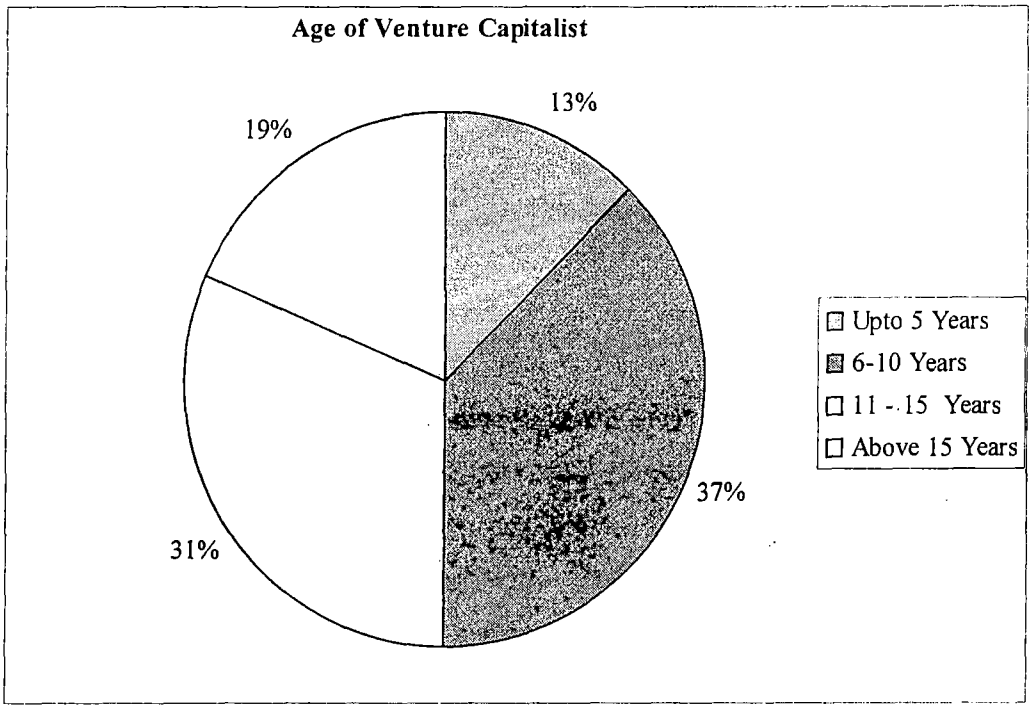


Figure 4.2 Age of Venture Capitalist



Locations of entrepreneurs

The district wise break up of location of entrepreneurs is shown in the table below.

Table 4.2 District-Wise Responses from Entrepreneurs of Uttar Pradesh

Sr.No	City	No. of Respondent	Sr.No.	City	No. of Respondent
1	Agra	17	15	Hapur	6
2	Allahabad	8	16	Hardoi	2
3	Ambedkarnagar	3	17	Jhansi	3
4	Azamgarh	2	18	Kanpur	99
5	Barabanki	3	19	Lucknow	82
6	Bareilly	32	20	Meerut	61
7	Bijnor	3	21	Modinagar	7
8	Bulandsahar	2	22	Rae Bareily	5
9	Deoband	3	23	Shahjahanpur	7
10	Deoria	3	24	Sitapur	4
11	Faizabad	5	25	Sultanpur	1
12	Farrukhabad	1	26	Unnao	7
13	Gautambudh Nagar	10	27	Varanasi	2
14	Ghaziabad	7	28	Others	1

The maximum numbers of respondent entrepreneurs were from Kanpur, which was followed by Lucknow and Meerut.

Age and gender of entrepreneur

The age of the respondent entrepreneurs in depicted in the pie chart below. Most of the entrepreneurs were in the age group of 40-50 years, which was followed by the age groups 30-40 years, 20-30 years and lastly above 50 years.

Of the 386 respondents, 31 were females and 355 were males. The gender of entrepreneurs has also been depicted in the graph below.

Figure 4.3 Age of Entrepreneur

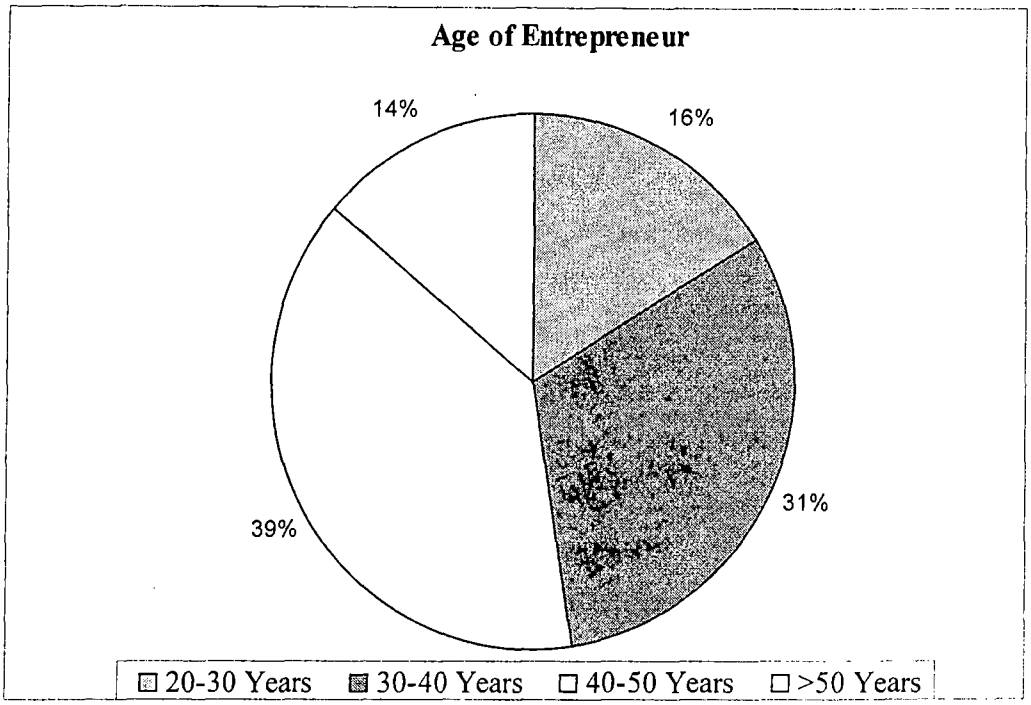
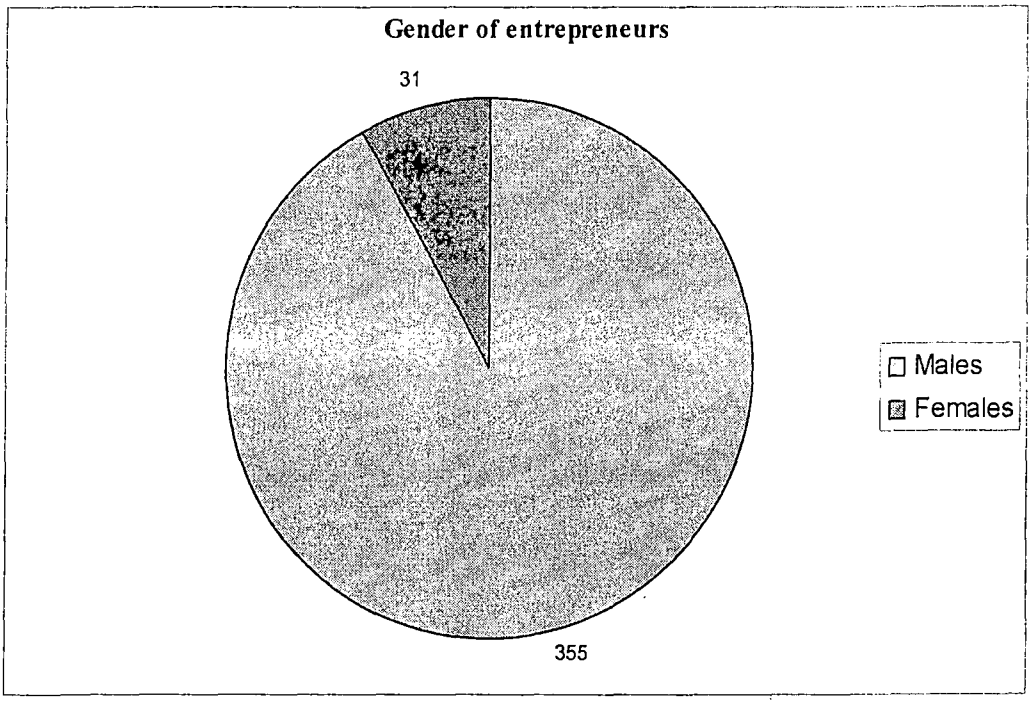


Figure 4.4 Gender of entrepreneur



4.12 Non Response Analysis

Test was conducted to test the non-respondent bias. The responses from early and late respondents were compared. This was done to provide evidence of the potential non-response bias. Late respondent have been argued to be more representative of those in the sample who did not respond than are earlier respondent (Armstrong & Overton, 1977). The differences between the responses of the early (first 60) and late (last 60) respondent entrepreneurs was tested, for the problems faced in raising equity, debt and the assistance expected from venture capital.

Table: 4.3 Test of difference between early (first 60) and late (last 60) respondents

	First 60		**Last 60 Respondent**			
	Mean	Standard Deviation	Mean	Standard Deviation	T	Sig (2 tailed)
Problem in raising equity	26.33	3.35	27.15	3.31	-1.34	0.18
Problem in raising debt	27.06	3.27	27.43	3.34	-0.61	0.55
Assistance from venture capital	21.73	3.38	21.80	3.06	-0.11	0.91

The test results are presented in table 4.3.As per the independent sample T-test; the corresponding two-tailed p value is 0.18, 0.55 and 0.91. The results show that there was no difference between the early and late respondents.

4.13 Follow-up survey

In order to check the reliability and stability of measures, a follow up survey was administered six months after the original survey in March 2008 (Carmines & Zellar, 1979, Litwin 1995, Nunnally 1978). The follow up survey was administered to the entrepreneurs.100 entrepreneurs were sent questionnaire through email out of which 48 entrepreneurs responded. The responses of the follow up survey were tested with the main survey in order to see if there was any difference in the responses. The responses on the problems faced in raising equity, debt and the assistance expected from venture capital were tested. The result of the test is presented in table 4.4.

Table: 4.4 Test of differences in the earlier responses and follow-up responses

	Earlier Response		Follow-up Response			
	Mean	Standard Deviation	Mean	Standard Deviation	T	Sig (2 tailed)
Problem faced in equity	26.33	3.35	27.15	3.31	0.30	0.76
Problem faced in debt	27.06	3.27	27.43	3.34	0.00	1.00
Assistance from venture capital	21.73	3.38	21.80	3.06	0.22	0.82

As per the independent sample T-test, the corresponding two-tailed p value is 0.76,1.00 and 0.82.The results indicated that there was no statistical difference between responses from main and the follow-up survey.

4.14 Data Analysis Techniques

The data collected through the two questionnaires were coded, tabulated and analyzed. The analysis of data was done with the help of software of Statistical Package for Social Sciences version 16.0 (SPSS).

1. **Descriptive statistics** -numerical and graphical methods were used to summarize data and bring forth the underlying information. The numerical methods included measures of central tendency and measures of variability.
2. **Statistical test-** in this study the data is obtained from a sample and not through census. Therefore hypothesis testing is done in order to draw inferences (Cooper & Schindler 2001) .The following test were used for hypothesis testing;
    i) **T-test**-these were used to compare means of two samples or between some standard value and the mean of one sample. In this study different varieties of t-tests, have been used, depending on the design of the study or the nature of data.
    ii) **Chi-squares analysis-** examines the frequencies for two nominal scaled variables in a cross-tabulation table to determine whether the

variables have a non-monotonic (unvarying quality) relationship, i.e. Chi-squares test for independence is used to test whether two categorical variables are independent of each other.

iii) **ANOVA-** analysis of variances is used to compare the means of more than two populations. It investigates the differences between group means to ascertain whether sampling error or true population differences explain their failure to be equal.

4.15 Reliability and Validity of data

In this dissertation a considerable amount of attention has been given to ensure the reliability and validity of the results. As mentioned the hypotheses have been developed based on received theories. Related earlier research has been used while developing the constructs and measurement items. Reliable data source have been used, and re-testing is used to validate the primary data used. Statistical methods have been carefully selected and employed after ensuring fulfillment of assumptions. Finally, results and conclusions have been carefully analyzed to ensure their feasibility.

4.15.1 Reliability

Reliability is the consistency of measurement, or the degree to which an instrument measures the same way each time it is used under the same condition with the same subjects. In short, it is the repeatability of measurement. A measure is considered reliable if score on the same test given twice is similar. Test/retest is a method to estimate of reliability. Simply put, the idea behind test/retest is to get the same score on test 1 as you do on test 2. In this study, a follow up was conducted six months after the previous (first) one. Apart from the test-retest procedure, several other methods were used to ensure reliability. The two dimensions of reliability namely reliability of empirical data and reliability of constructs have been ensured.

Reliability of empirical data was ensured in the following

i) As a single informant answered the survey questionnaire, it was important that the respondent is knowledgeable as to the operations of the firm. In order to maximize the reliability of data in this study, the survey was administered to key informants as suggested by John & Reeve 1982.

ii) Questionnaires were carefully designed with several rounds of revisions. Several interviews and pre-testing of the questionnaire gave confidence that the respondents would not have problems in understanding the questions and that they would be knowledgeable about the issues covered by the questionnaire. Spector (1992) suggested this method to ensure reliability of data.

iii) A follow-up survey was conducted after six months as suggested by Carmines & Zeller, 1979. The responses were compared by analysis (Table 4.4), which showed no difference in the response in the main and follow-up survey.

iv) The reliability of the constructs, which refers to the extent the measurement of the construct can be considered as reliable, was also ensured. Firstly, multi-item scales were used to measure the constructs (Spector, 1992). Secondly, apart from the test-retest method, Cronbach's Alpha was also used to measure the reliability. Cronbach's Alpha measures the inter-item reliability of construct and refers to the extent measurement items are co-related with each other.

The results of Cronbach's Alpha test are presented in the table 4.5. The common threshold value of 0.70 is considered as acceptable. (Nunnally, 1978; Gaur & Gaur, 2006). As shown in table all multi-item constructs appear to be reliable are above 0.70 except the construct for problems in venture capital that is 0.635.

4.15.2 Validity

Validity is the strength of our conclusions, inferences or propositions. More formally, it as the "best available approximation to the truth or falsity of a given inference, proposition or conclusion." In short, are we right? (Cook & Campbell, 1979). The following dimensions of validity were used:

1. Face validity

It refers to the extent the construct corresponds to the common understanding of the related concept. Face validity was ensured in several ways.

i) An extensive review of literature was carried out in order too understand the relevant concepts both in theory and in practice.

ii) The constructs and measurement items were developed on the basis of previous research as far as possible.

iii) The questionnaire was developed and pre-tested with entrepreneurs and Venture Capitalist to ensure that the measures were in line with the common understanding of the of the concepts.

Table 4.5 Cronbach's alpha Coefficients

	Constructs	No. of items	Cronbach's alpha	N
1	Characteristics of entrepreneurs	8	0.708	16
2	Features of product	4	0.733	16
3	Features of target market	3	0.731	16
4	Features of deal	7	0.742	16
5	Features of region	6	0.739	16
6	Venture capital and economic development	8	0.764	16
7	Venture capital and industrial development	7	0.728	16
8	Role of government	10	0.785	16
9	Role of venture capital in syndication	5	0.704	16
10	Problems faced in equity capital	8	0.702	386
11	Problems in debt capital	8	0.738	386
12	Help from venture capital	7	0.714	386
13	Problems in venture capital	8	0.635	386

2. **Content validity**

It refers to the extent to which the construct covers all relevant facets (Venkatraman & Grant 1996). For ensuring content validity, the following steps were undertaken:

i) An extensive review of literature was carried out in order to understand the relevant concepts both in theory and practice.

Previous studies on venture capital, Uttar Pradesh and the problems faced by entrepreneurs in raising funds were consulted. Thereafter the constructs were developed based on previous research and discussion with venture capitalist and entrepreneurs.

ii) The constructs were operationalized using multiple measurement items in order to improve content validity. Content validity was kept in mind when developing the construct and items measuring the construct.

iii) Questionnaire were developed and pre-tested with several venture capitalist and entrepreneurs.

3. **Construct validity**

It refers to whether the constructs measures the concept it is supposed to measure. Construct validity was ensured in the following ways:

i) Earlier validated constructs and measurement items were used where ever possible.

ii) New construct and measurement items were developed on the basis of theory and earlier related research.

Chapter 5

Data analysis and Interpretation

This chapter presents the data analysis and interpretation of the data obtained from the venture capitalist of India and the entrepreneurs of Uttar Pradesh. Descriptive analysis of the underlying variables is presented which is followed by the statistical analysis. For the venture capitalist an overview of the areas of interest for venture capitalist in Uttar Pradesh, stages of venture capital funding, criteria used by venture capitalist in evaluating an investment proposal, role of venture capital in economic development, role of venture capital in industrial development, role of government in promoting venture capital and role of syndication in promoting venture capital is presented. While for the entrepreneurs data related to entrepreneur's scale of business, funds requirement, problems in raising equity, problems in raising debt, problems in raising venture capital and assistance from venture capital funds has been presented.

5.1. Analysis of data - Venture Capitalist

This section presents the data obtained from the survey of venture capitalists.

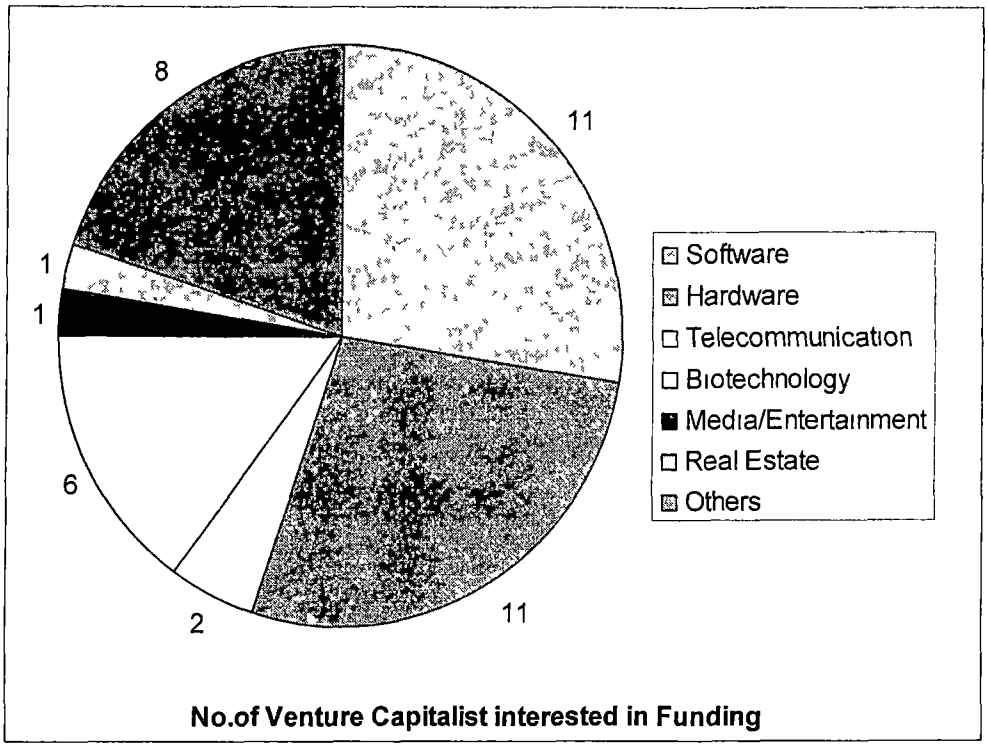
5.1.1 Areas of interest for Venture Capitalist: Venture capitalists were asked to give their areas of interest for funding in Uttar Pradesh. The areas of interest in Uttar Pradesh have been shown in the table and pie chart given below.

Table 5.1 Investment areas in Uttar Pradesh

	Area of interest	No. Of Venture Capitalist
1	Software	11
2	Hardware	11
3	Telecommunication	2
4	Biotechnology	6
5	Media/Entertainment	1
6	Real Estate	1
7	Others	8

As shown in the table above for venture capitalist Software, Hardware and Biotechnology were the top three areas of interest in the state of Uttar Pradesh.

Figure 5.1 Investment areas in Uttar Pradesh

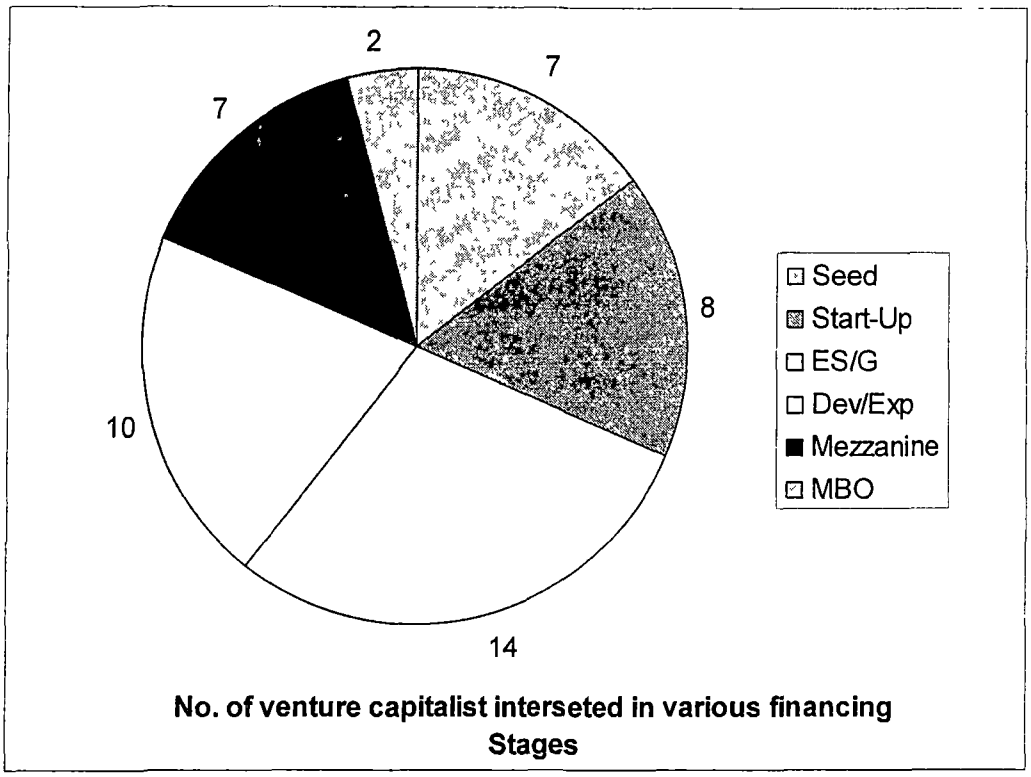


5.1.2 Stages of Venture Capital Funding: Venture capitalists were asked to give their preferences regarding the various stages of financing. As can be seen from the table and pie chart, Early Stage/Growth, Development /Expansion and Start up were the top three areas of interest.

Table 5.2 Stages of Venture Capital Funding in Uttar Pradesh

Stages of Financing	No. Of Venture Capitalist
Seed financing	7
Start up financing	8
Early stage/Growth financing	14
Development/expansion financing	10
Mezzanine financing	7
Management Buy in/ Buy out	2

Figure 5.2 Stages of Venture Capital Funding in Uttar Pradesh



5.1.3 Criteria used by venture capitalist in evaluating an investment proposal

Criteria used by venture capitalist in evaluating an investment proposal were classified into five different heads; characteristics of entrepreneurship, characteristics of target market, characteristics of products and services, features of deal and features of region. Venture capitalists were asked to rate the above five criteria as perceived by them. Venture Capitalist rated the importance of the above criteria and then they also rated the presence of these criteria in investment proposals from Uttar Pradesh.

The various features of the evaluation criteria have been discussed. First a descriptive analysis is given, which is followed by the statistical test for significance and then the associated hypothesis are tested. Data on the evaluation criteria is obtained from questions numbers 2 and 3 from the questionnaire for the venture capitalist.

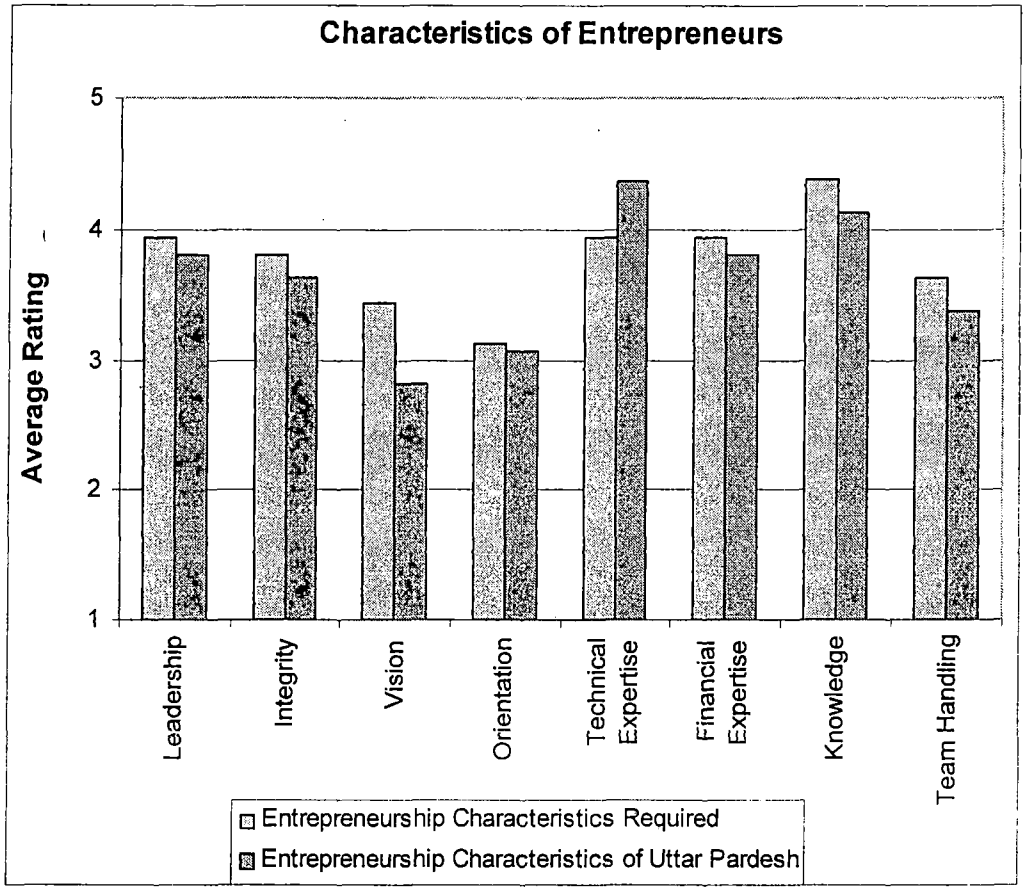
5.1.3.1 Characteristics of entrepreneurship: The following features were rated by venture capitalist.

1. Leadership qualities
2. Integrity and commitment

3. Long term vision
4. Commercial orientation
5. Technical expertise
6. Financial expertise
7. Knowledge of market
8. Ability to handle a team

The responses have been depicted in the graph and table below.

Figure 5.3 Characteristics of Entrepreneurs



As can be seen from the graph and table all of the above features are important for a venture capitalist. The most important entrepreneur characteristics are the knowledge of market, leadership qualities, technical expertise and financial expertise.

Table 5.3 Characteristics of Entrepreneurs

	Characteristics	Average Rating Required	Average Rating in Uttar Pradesh
1	Leadership Qualities	3.94	3.79
2	Integrity and Commitment	3.81	3.62
3	Long Term Vision	3.44	2.81
4	Commercial Orientation	3.13	3.06
5	Technical Expertise	3.93	4.37
6	Financial Expertise	3.93	3.81
7	Knowledge of Market	4.38	4.13
8	Ability to handle a Team	3.62	3.43

Also for Uttar Pradesh all the above features of entrepreneurship except long-term vision are present in investment proposals from Uttar Pradesh. Venture capitalist rated the entrepreneurs from Uttar Pradesh highest on technical knowledge, which was followed by the knowledge of market and financial expertise.

Statistical Test

The following Statistical tests have been undertaken related to the characteristics of entrepreneurs:

1. **Test of significance of attributes related to the characteristics of entrepreneurs.**
   i. Attributes as required by Venture Capitalist- have been tested and the results have been shown in the table below. All the attributes desired by venture capitalist have been found to be significant at 99 %level.

Table 5.4: Test of significance: Entrepreneurship attributes as required by venture capitalist

Test Value = 0		
	T	Sig. (2-tailed)
Leadership	14.017	0.000
Integrity	37.831	0.000

Vision	26.837	0.000
Orientation	19.053	0.000
Technical	27.452	0.000
Financial	27.452	0.000
Knowledge	21.706	0.000
Team	29.000	0.000

ii. Attributes as presents in proposals from Uttar Pradesh-Have been tested and the results have been shown in the table below. All the attributes have been found to be significant at 99 %level. The results are shown in the table below.

Table 5.5: Test of significance: Entrepreneurship attributes presents in proposals from Uttar Pradesh

Test Value = 0		
	T	Sig. (2-tailed)
Leadership	16.747	0.000
Integrity	23.420	0.000
Vision	16.704	0.000
Orientation	16.704	0.000
Technical	25.035	0.000
Financial	23.279	0.000
Knowledge	20.466	0.000
Team	16.745	0.000

2. **Significance test for differences in Individual variables** between entrepreneurship characteristics required by Venture Capitalist and entrepreneurship characteristics present in proposals from Uttar Pradesh.

Based on the individual characteristic of entrepreneurship the following **null hypotheses** were tested:

$H1_{a1o}$: There is no difference in the leadership qualities of entrepreneurs in Uttar Pradesh and the leadership qualities required by a venture capitalist.

$H1_{a2o}$: There is no difference in the integrity and commitment of entrepreneurs in Uttar Pradesh and the integrity and commitment as required by a venture capitalist.

$H1_{a3o}$: There is no difference in the long-term vision of entrepreneurs in Uttar Pradesh and the long-term vision as required by a venture capitalist.

$H1_{a4o}$: There is no difference in the commercial orientation of entrepreneurs in Uttar Pradesh and the commercial orientation as required by a venture capitalist.

$H1_{a5o}$: There is no difference in the technical expertise of entrepreneurs in Uttar Pradesh and the technical expertise as required by a venture capitalist.

$H1_{a6o}$: There is no difference in the financial expertise of entrepreneurs in Uttar Pradesh and the financial expertise required by a venture capitalist.

$H1_{a7o}$: There is no difference in the market knowledge of entrepreneurs in Uttar Pradesh and the market knowledge as required by a venture capitalist.

$H1_{a8o}$: There is no difference in the team handling ability of entrepreneurs in Uttar Pradesh and the team handling ability required by a venture capitalist.

Table 5.6 Summary of t-test results for the hypothesis based on the individual Characteristic of Entrepreneurship

$H1_{a1o}$	There is no difference in the leadership qualities of entrepreneurs in Uttar Pradesh and the leadership qualities required by a venture capitalist.	T= -0.549 P=0.591	Accept Null Hypothesis
$H1_{a2o}$	There is no difference in the integrity and commitment of entrepreneurs in Uttar Pradesh and the integrity and commitment as required by a venture capitalist.	T= -1.211 P=0.224	Accept Null Hypothesis
$H1_{a3o}$	There is no difference in the long-term vision of entrepreneurs in Uttar Pradesh and the long-term vision as required by a venture capitalist.	T= -2.702 P=0.016	Reject Null Hypothesis
$H1_{a4o}$	There is no difference in the commercial orientation of entrepreneurs in Uttar Pradesh and the commercial orientation as required by a venture capitalist.	T= -0.436 P= 0.66	Accept Null Hypothesis

$H1_{a5o}$	There is no difference in the technical expertise of entrepreneurs in Uttar Pradesh and the technical expertise as required by a venture capitalist.	T= 2.827 P= 0.012	Reject Null Hypothesis
$H1_{0a6}$	There is no difference in the financial expertise of entrepreneurs in Uttar Pradesh and the financial expertise required by a venture capitalist.	T= -0.76 P=0.457	Accept Null Hypothesis
$H1_{a7o}$	There is no difference in the market knowledge of entrepreneurs in Uttar Pradesh and the market knowledge as required by a venture capitalist.	T= -1.23 P= 0.234	Accept Null Hypothesis
$H1_{a8o}$	There is no difference in the team handling ability of entrepreneurs in Uttar Pradesh and the team handling ability required by a venture capitalist.	T= -1.24 P= 0.233	Accept Null Hypothesis

As can be seen from the tables above null hypotheses $H1_{a1o}$, $H1_{a2o}$, $H1_{a4o}$, $H1_{a6o}$, $H1_{a7o}$ and $H1_{8o}$ stand vindicated where as null Hypotheses $H1_{a3o}$ and $H1_{a5o}$ have been rejected at 95 % confidence level.

3. **Overall Significance test for difference** between entrepreneurship characteristics required by Venture Capitalist and entrepreneurship characteristics present in proposals from Uttar Pradesh.

Null Hypothesis, $H1_{a0}$ There is no difference between the characteristics of entrepreneurs in Uttar Pradesh and the characteristics of entrepreneurs required by a venture capitalist.

Alternate hypothesis, $H1_a$ There is a difference between the characteristics of entrepreneurs in Uttar Pradesh and the characteristics of entrepreneurs required by a venture capitalist.

Based on the data on the features of entrepreneur in this study, **Hypothesis 1 $_a$,** has been tested, the results are shown in table below.

Table 5.7 Overall Significance Test: Characteristics of Entrepreneurs

	N	Mean	Std. Deviation	T	Sig. (2-tailed
VC Entrepreneur	16	29.125	3.18	-1.67	0.116

The above test results, give a t-statistics of -1.67 and the corresponding two-tailed p value is 0.116. As $P > 0.05$, the null hypothesis $\mathbf{H1_{ao}}$ (There is no difference between the characteristics of entrepreneurs in Uttar Pradesh and the characteristics of entrepreneur required by a venture capitalist) **stands vindicated.** Therefore, there is no difference between the characteristics of entrepreneurs in Uttar Pradesh and the characteristics of entrepreneurship required by a venture capitalist.

Comparison with previous studies

As per this study, features of entrepreneurship are important for evaluating of investment proposals. The findings of previous studies on characteristics of entrepreneurship are as follows:

Previous Indian studies -Venture capitalist performs soul searching to be sure that entrepreneur has certain key characteristics needed to thrive in competitive business world. In previous Indian studies, Pandey (1995), Venture capitalists consider the entrepreneur's integrity and urge to grow as the most important aspects. While another study by Mishra (2003) also gave similar results with integrity, long-term vision and urge to grow as the top three entrepreneurship criteria. On the other hand venture capitalists in general claim that they were not much concerned with whether the entrepreneur is amenable to suggestion and criticism. The means of most of the features related to the entrepreneur were high in previous studies, indicating the relevance of features of entrepreneurship from the point of venture capitalist. There was also a high consensus that the key experience required was a thorough familiarity with the target market. Almost as important was the demonstrated leadership in the past.

Previous Foreign studies- Study of Knight (1994) on venture capital in US, Canada, East Asia and Europe shows that the top three criteria of an entrepreneurs personality

from the point of view of a venture capitalist are the capability of sustained effort, ability to evaluate and react to risk and their being articulate in discussing venture.

The importance of entrepreneur's capability has also been highlighted in terms of their past experience (Starr & Bygrave, 1991). Using the past experience of an entrepreneur as means to evaluate the success of new ventures has also been suggested in some studies (Macmillan et al., 1987).

5.1.3.2. Characteristics of Product/Services: The following features were rated by venture capitalist.

1. Uniqueness (One of its kind)
2. Existence of Prototype
3. Existence of Patent
4. Superior Product (Better than existing Product/Services)

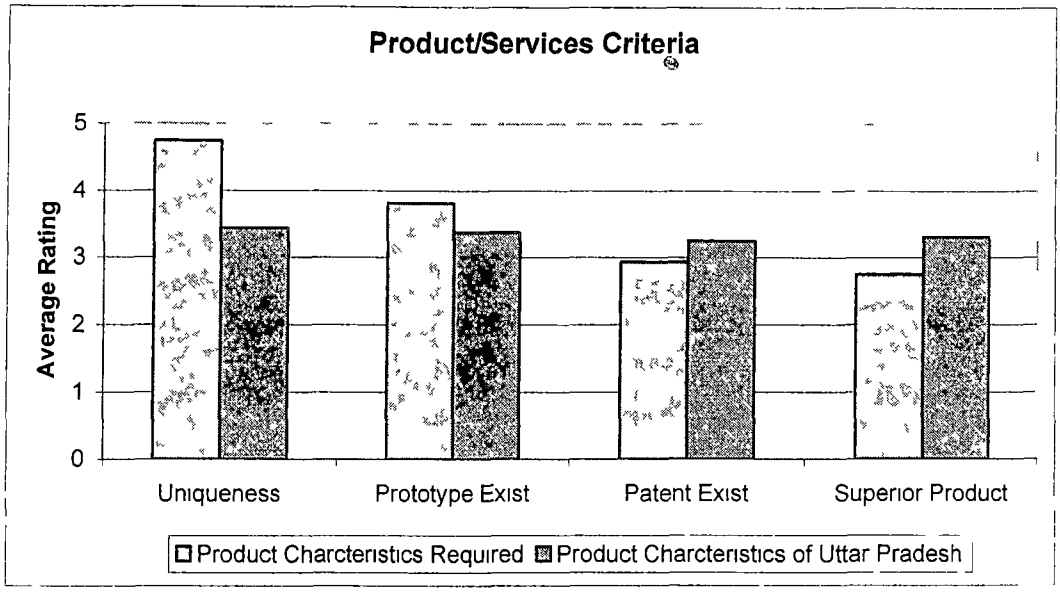
Features of Product/Service - The results of are shown in the figure and table below. Of the various features related to the product/services, venture capitalists perceive product uniqueness as the most important criteria and superior than existing product as the least important criteria.

The average rating of product/service features in Uttar Pradesh shows that all the features are present in investment proposals. The presence (highest to lowest) was as follows, product uniqueness, existence of prototype, superiority over the existing product and the existence of patent.

Table 5.8 Features of Product/Service

	Characteristics	**Average Rating Required**	**Average Rating in Uttar Pradesh**
1	Uniqueness	4.75	3.44
2	Prototype Exist	3.18	3.37
3	Patent Exist	2.93	3.25
4	Superior Product	2.75	3.31

Figure 5.4 **Features of Product/Service**



Statistical test: Characteristics of products and services

1 **Test of significance of attributes related to the characteristics of products and services.**

i. Attributes as required by Venture Capitalist-Have been tested and the results have been shown in the table below. All the attributes desired by a venture capitalist have been found to be significant at 99 %level. The results are shown in the table below.

Table 5.9: Test of significance: Attributes of products and services as required by Venture Capitalist

Test Value = 0		
	T	Sig. (2-tailed)
Uniqueness	42.485	0.000
Prototype	12.996	0.000
Patent	11.058	0.000
Superior	11.000	0.000

ii. Attributes related to the Characteristic of products and services presents in proposals from Uttar Pradesh have been tested and the

results have been shown in the table below. All the attributes have been found to be significant at 99 %level. The results are shown in the table below.

Table 5.10: Test of significance: Attributes of products and services presents in proposals from Uttar Pradesh

Test Value = 0		
	T	Sig. (2-tailed)
Uniqueness	15.413	0.000
Prototype	14.100	0.000
Patent	14.697	0.000
Superior	13.061	0.000

2. **Significance test for differences in individual variables** between characteristics of products and services as required by Venture Capitalist and characteristics of products and services present in proposals from Uttar Pradesh.

Based on the individual characteristic of products and services the following null hypotheses were tested

$H1_{b1o}$: The presence of uniqueness in product and services in investment proposals from Uttar Pradesh is as per the requirement of Venture Capitalist.

$H1_{b2o}$: The presence of product prototype in investment proposals from Uttar Pradesh is as per the requirement of Venture Capitalist.

$H1_{b3o}$: The presence of patent in investment proposals from Uttar Pradesh is as per the requirement of Venture Capitalist.

$H1_{b4o}$: The presence of superiority in Products and services in investment proposals from Uttar Pradesh is as per the requirement of Venture Capitalist.

Table 5.11 Summary of t-test results for the hypotheses based on the individual characteristic of products and services

$H1_{b1o}$	The presence of uniqueness in product and services in investment proposals from Uttar Pradesh is as per the requirement of Venture Capitalist.	T=-5.88 P=0.000	Reject Null Hypothesis
$H1_{b2o}$	The presence of product prototype in investment proposals from Uttar Pradesh is as per the requirement of Venture Capitalist.	T=0.783 P=0.446	Accept Null Hypothesis
$H1_{b3o}$	The presence of patent in investment proposals from Uttar Pradesh is as per the requirement of Venture Capitalist.	T=0.306 P=0.764	Accept Null Hypothesis
$H1_{b4o}$	The presence of superiority in Products and services in investment proposals from Uttar Pradesh is as per the requirement of Venture Capitalist.	T=2.218 P=0.042	Reject Null Hypothesis

As can be seen from the table above hypotheses $H1_{b2o}$ and $H1_{b3o}$ stand vindicated while null hypotheses $H1_{b1o}$ and $H1_{b4o}$ have been rejected while at 99 % and 95 % confidence levels.

3. **Overall Significance test** for difference between the characteristics of products and services required by venture capitalist and the characteristics of products and services present in proposals from Uttar Pradesh.

Null Hypothesis, $H1_{bo}$: There is no difference between the characteristics of products and services in proposal from Uttar Pradesh and the characteristics of products and services required by a venture capitalist.

Alternate hypothesis, $H1_{b:}$ There is difference between the characteristics of products and services in proposal from Uttar Pradesh and the characteristics of products and services required by a venture capitalist.

Based on the data of the characteristics of products and services in this study, **Hypothesis 1** $_b$ has been tested; the results are shown in table below

Table 5.12 Overall Significance Test for difference in the characteristics of products and services

	N	Mean	Std. Deviation	t	Sig. (2-tailed
VC Features of products and Services	16	13.12	1.78	-1.12	0.28

The above test results show t-statistics of -1.12 and the corresponding two-tailed p value is 0.28. As P >0.05, the **Null Hypothesis,** $H1_{bo}$ (There is no difference between the characteristics of products and services in proposal from Uttar Pradesh and the characteristics of products and services required by a venture capitalist) **is accepted.** Therefore there is no difference between the characteristics of products and services in proposals from Uttar Pradesh and the characteristics of products and services required by a venture capitalist.

Comparison with previous studies

As per this study, characteristics of product are important in the evaluation of investment proposals. The findings of previous studies on characteristics of product are as follows:

Indian studies -Previous Indian studies on the features of product show that product uniqueness and product developed to the point of functioning prototype were the most important criteria for evaluating the funding of a venture (Pandey, 1995). But later study by Mishra (2003) showed that a high-tech product, a product protected by patent and unique product to be the important features of product/services. Mishra (2003) also suggests that the reason for the shift in priorities of product and services has been due to the emphases of government of India in promoting high technology financing.

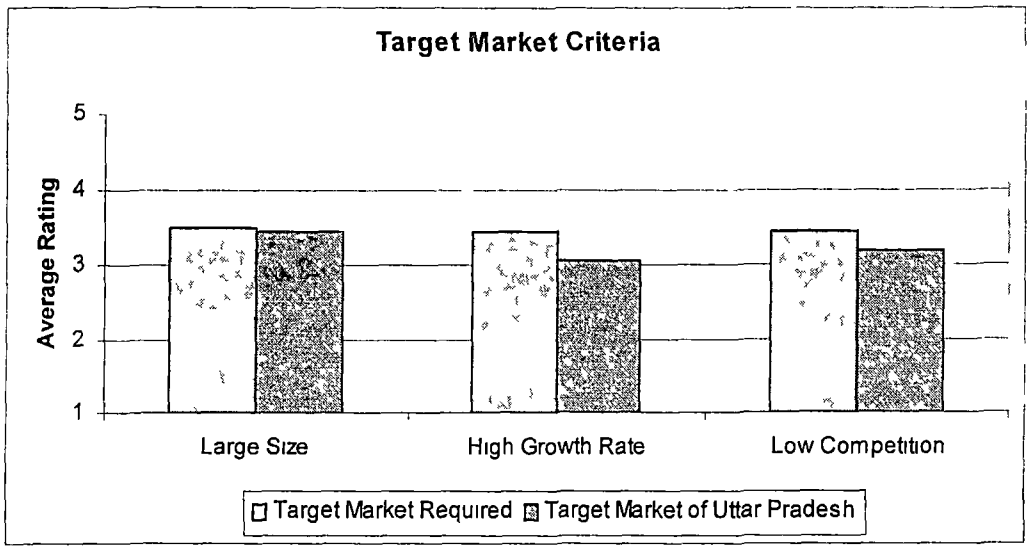
Foreign studies -Knight (1994) indicated that the ratings of requirements in the characteristics of product /services differ from country to country but the feature of the product/service being high-tech has a low rating in different countries.

5.1.3.3. Characteristics of Target Market: The following features were rated by venture capitalist.

1. Large size
2. High growth rate
3. Low competition

The responses from venture capitalist have been presented below. As can be seen Large size, High growth rate and Low competition were all rated as important by Venture Capitalist for evaluating a proposal from the point of view of the target market. A large market size and low competition were the most important and least important respectively.

Figure 5.5 Features of target market for Uttar Pradesh



All the above-mentioned features of target market are present in proposals from Uttar Pradesh. For investment proposals from Uttar Pradesh the presence of a large size and high growth rate got the highest and lowest ratings respectively.

Table 5.13 Features of Target Market for Uttar Pradesh

	Characteristics	Average Rating Required	Average Rating in Uttar Pradesh
1	Large Size	3.50	3.44
2	High Growth Rate	3.44	3.06
3	Low Competition	3.43	3.19

Statistical Test

The following Statistical test have been undertaken related to the Features of target market

1. **Test of significance of attributes related to the characteristics of entrepreneurs.**

   i) Attributes as required by Venture Capitalist have been tested and the results have been shown in the table below. All the attributes desired by venture capitalist have been found to be significant at 99 % level.

Table 5.14 Test of significance: Attributes of target market as required by Venture Capitalist

Test Value = 0		
	T	Sig. (2-tailed)
Size	14.491	.000
Growth rate	14.264	.000
Competition	15.413	.000

ii). Attributes as presents in proposals from Uttar Pradesh have been tested and the results have been shown in the table below. All the attributes have been found to be significant at 99% level. The results are shown in the table below.

Table 5.15: Test of significance: Attributes of target market presents in proposals from Uttar Pradesh

Test Value = 0		
	T	Sig. (2-tailed)
Size	18.902	.000
Growth rate	15.870	.000
Competition	11.500	.000

2. **Significance test for differences in Individual variables** between features of target market required by Venture Capitalist and features of target market present in proposals from Uttar Pradesh.

Based on the individual the features of target market following null hypotheses were tested:

$H1_{c1o}$: There is no difference in the market size in proposal from Uttar Pradesh and the market size as required by a venture capitalist.

$H1_{c2o}$: There is no difference in the market growth rate in proposal from Uttar Pradesh and the market growth rate as required by a venture capitalist.

$H1_{c3o}$: There is no difference in the market competition in proposal from Uttar Pradesh and the market competition as required by a venture capitalist.

Table 5.15 Summary of t-test results for the hypotheses based on the individual features of target market

$H\ 1_{0c1}$	There is no difference in the market size in proposal from Uttar Pradesh and the market size as required by a venture capitalist.	T= -0.34 P=0.736	Accept Null Hypothesis
$H\ 1_{0c2}$	There is no difference in the market growth rate in proposal from Uttar Pradesh and the market growth rate as required by a venture capitalist.	T= -1.934 P=0.071	Accept Null Hypothesis
$H\ 1_{0c3}$	There is no difference in the market competition in proposal from Uttar Pradesh and the market competition as required by a venture capitalist.	T=-0.902 P=0.381	Accept Null Hypothesis

As can be seen from the tables above all the null hypotheses stand vindicated.

3. **Overall Significance test** for difference between the target market required by Venture Capitalists and the target market present in proposals from Uttar Pradesh.

Null Hypothesis, $H1_{co}$: There is no difference between the characteristics of target market in proposal from Uttar Pradesh and the characteristics of target market required by a venture capitalist.
Alternate hypothesis, $H1_c$. There is difference between the characteristics of target market in proposal from Uttar Pradesh and the characteristics of target market required by a venture capitalist.

Based on the data collected in this study, **Hypothesis 1 $_c$** has been tested. The results are shown in the table below.

Table 5.16 Overall Significance Test: Features of target market

	N	Mean	Std. Deviation	t	Sig. (2-tailed
VC Features of Target Market	16	9.69	1.53	-1.79	0.94

The test results give the t-statistics of -1.79 and the corresponding two-tailed p value is 0.94.As P >0.05, the null hypothesis, $H1_{co}$, (There is no difference between the characteristics of target market in proposal from Uttar Pradesh and the target market characteristics required by a venture capitalist) stands vindicated. Therefore, there is no difference between the characteristics of target market in proposal from Uttar Pradesh and the target market qualities required by a venture capitalist.

Comparison with previous studies

As per this study, characteristics of target market are important criteria in the evaluation of investment proposals. The findings of previous studies on characteristics of product are as follows:

Indian studies -For Indian Venture Capitalist the critical market requirements vary in the previous studies. A high growth rate is seen important as per as Pandey (1995), while there are a number of factors, considered important by Mishra (2003). Reasons for the changes in the market requirement of the two studies have been attributed to the change in business environment due to liberalization and globalization (Mishra. 2003).

Foreign Studies- Knight (1994), show that a high market growth rate is the top most criteria which venture capitalist consider in the characteristic of market in a proposal. Rating of other features varies from country to country but ability to create a new market gets the lowest importance in different countries.

5.1.3.4. Features of Deal: The following features were rated by venture capitalist.

1. Percentage share of equity (ownership) offered to venture capitalist
2. Price of equity being offered to venture capitalist
3. Low risk
4. High returns
5. Whether other venture capitalist are willing to participate
6. Provisions in contracts to mitigate conflict with the entrepreneurs
7. Option of exit (ease of liquidation when needed

Features of deal

As shown in the table and graph given below all the above features of deal are important except the price of equity. The most important criteria for venture capitalists are the level of risk followed by the returns and provisions in contract to mitigate conflicts with entrepreneurs.

Proposal from Uttar Pradesh fulfills most of the deal feature except the option of easy exit. The highest rating was for willingness of other Venture Capitalist to participate followed by provisions in contract to mitigate conflicts with entrepreneurs and price of equity.

Figure 5.6 Features of deal for Uttar Pradesh

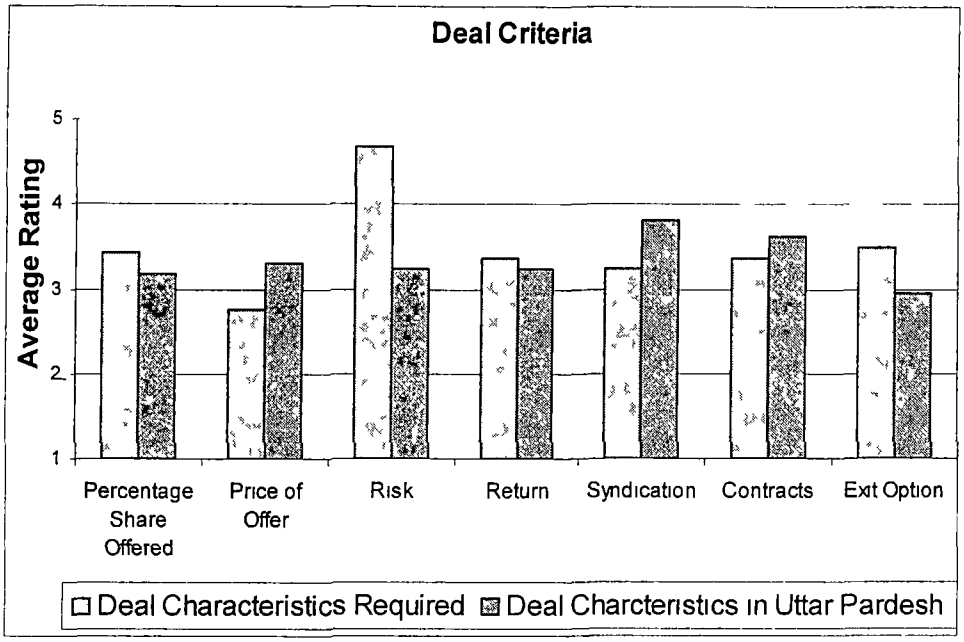


Table 5.17 Features of deal for Uttar Pradesh

	Deal Characteristics	Average Rating Required	Average Rating in Uttar Pradesh
1	Percentage share of equity	3.43	3.18
2	Price of equity being offered to VC	2.75	3.31
3	Low risk	4.68	3.25
4	High returns	3.38	3.25
5	Willingness of other venture capitalist to participate	3.25	3.81
6	Provision in contracts to mitigate conflict entrepreneurs	3.38	3.62
7	Option of exit (ease of exit)	3.50	2.87

Statistical Test

The following Statistical tests have been undertaken related to the features of deal.

1. **Test of significance of attributes related to the features of deal**
   i. Attributes as required by Venture Capitalist have been tested and the results have been shown in the table below. All the attributes

desired by venture capitalist have been found to be significant at 99 % level. The results are shown in the table below

Table 5.18 Test of significance: Deal attributes as required by Venture Capitalist.

Test Value = 0		
	t	Sig. (2-tailed)
Share	15.413	0.000
Price	11.000	0.000
Risk	39.167	0.000
Returns	11.765	0.000
Syndication	11.551	0.000
Contracts	10.729	0.000
Exit	12.124	0.000

ii. Attributes as presents in proposals from Uttar Pradesh-Have been tested and the results have been shown in the table below. All the attributes have been found to be significant at 99 % level. The results are shown in the table below.

Table 5.19: Test of significance: Deal attributes presents in proposals from Uttar Pradesh.

Test Value = 0		
	t	Sig. (2-tailed)
Share	19.462	0.000
Price	15.174	0.000
Risk	19.030	0.000
Returns	22.517	0.000
Syndication	20.333	0.000
Contracts	16.383	0.000
Exit	11.775	0.000

2. **Significance test for differences in individual variables** between features of deal required by venture capitalist and features of deal present in proposals from Uttar Pradesh.

Based on the individual characteristic of Features of deal the following null hypotheses were tested:

$H1_{d1o}$: The percentage share of equity (ownership) offered to venture capitalist in proposals from Uttar Pradesh is as per the requirement of venture capitalist.

$H1_{d2o}$: The price of equity being offered to venture capitalist in proposals from Uttar Pradesh is as per the requirement of venture capitalist.

$H1_{d3o}$: The level of risk in proposals from Uttar Pradesh is as per the acceptance level of venture capitalist.

$H1_{d4o}$: The returns in proposals from Uttar Pradesh are as per the requirement of venture capitalist.

$H1_{d5o}$: The willingness of other venture capitalist to participate in proposals from Uttar Pradesh is as per the requirement of venture capitalist.

$H1_{d6o}$: The provisions in contracts in proposals from Uttar Pradesh are as per the requirement of venture capitalist.

$H1_{d7o}$: The ease of exit in proposals from Uttar Pradesh is as per the requirement of venture capitalist.

Table 5.20: Summary of t-test results for the hypotheses based on the individual attributes of deal

$H1_{d1o}$	The percentage share of equity (ownership) offered to venture capitalist in proposals from Uttar Pradesh is as per the requirement of venture capitalist.	T=-1.52 P=0.148	Accept Null Hypothesis
$H1_{d2o}$	The price of equity being offered to venture capitalist in proposals from Uttar Pradesh is as per the requirement of venture capitalist.	T= 2.57 P=0.021	Reject Null Hypothesis
$H1_{d3o}$	The level of risk in proposals from Uttar Pradesh	T= -8.41	Reject Null

	is as per the acceptance level of venture capitalist.	P=0.000	Hypothesis
$H1_{d4o}$	The returns in proposals from Uttar Pradesh are as per the requirement of venture capitalist.	T= -0.86 P=0.40	Accept Null Hypothesis
$H1_{d5o}$	The willingness of other venture capitalist to participate in proposals from Uttar Pradesh is as per the requirement of venture capitalist.	T= 3.00 P=0.009	Reject Null Hypothesis
$H1_{d6o}$	The provisions in contracts in proposals from Uttar Pradesh are as per the requirement of venture capitalist.	T= 1.13 P=0.27	Accept Null Hypothesis
$H1_{d7o}$	The ease of exit in proposals from Uttar Pradesh is as per the requirement of venture capitalist.	T= -2.61 P=0.02	Reject Null Hypothesis

As can be seen from the tables above null hypotheses $H1_{d1o}$, $H1_{d4o}$ and $H1_{d6o}$ stand vindicated. While null hypotheses $H1_{d2}$ and $H1_{d7o}$ have been rejected at 95 % confidence level and null hypotheses $H1_{d3o}$ and $H1_{d5o}$ are rejected at 99 % confidence level.

3. **Overall Significance test** for difference between Features of deal required by Venture Capital and Features of deal present in proposals from Uttar Pradesh.

Null Hypothesis, $H1_{d0}$: There is no difference between the features of deal in proposals from Uttar Pradesh and the features of deal required by a venture capitalist. Alternate hypothesis, $H1_d$ There is difference between the features of deal in proposals from Uttar Pradesh and the features of deal required by a venture capitalist.

Based on the data collected in this study, **Hypothesis 1_d** has been tested and the results have been shown in the table below

Table 5.21 Overall Significance Test: Features of deal

	N	Mean	Std. Deviation	t	Sig. (2-tailed
VC Features of deal	16	23.375	2.30	-1.19	0.091

Test results give the t-statistics of -1.19 and the corresponding two-tailed p value is 0.091.As P >0.05, the **Null Hypothesis, $H1_{do}$,** (There is no difference between the feature of deal in proposals from Uttar Pradesh and the feature of deal required by a venture capitalist) stands vindicated. Therefore there is no difference between the features of deal in proposals from Uttar Pradesh and the deal required by a venture capitalist.

Comparison with previous studies

As per this study, all the features of deal except price of equity being offered to a venture capitalist are important criteria in the evaluation of investment proposals. The findings of previous studies on characteristics of product are as follows:

Indian studies- Earlier study by Pandey (1995), shows that venture capitalist in India do not consider very high returns as a critical in a deal. A return of over 25% is mostly sought by the venture capitalist. This has been attributed to the assumption that if a right entrepreneur, a right product is chosen the returns will follow. Indian entrepreneur have placed considerable importance on the liquidity of investment. A later study by Mishra (2003) gives similar results except that most Venture capitalists require a return of over 100% in 5 years. In both the studies the consideration of having to participate in subsequent round of financing received low ratings.

Foreign studies- In the international context, Venture capitalist place greater emphasis on returns. As per Knight (994), venture capitalists take a high risk and therefore require a high rate of returns. Venture capitalist prefer returns through large capital gains on their investments rather than steady dividends or interest (Wilson, 1986).

5.1.3.5. Features of Region: The following features were rated by venture capitalist

1. Close to office of Venture capitalist
2. Clarity in the rules and regulations
3. Stability in policies
4. Infrastructure facilities to support the project
5. Availability of trained manpower
6. Conducive Law and order to prevent and resolve disputes

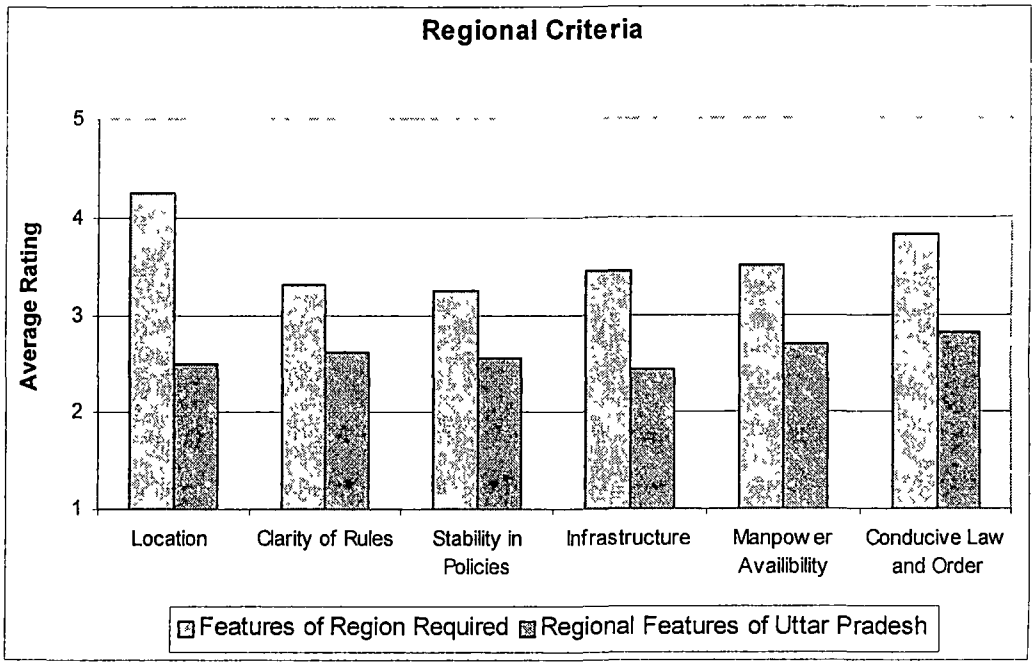
The results of which are shown the in the table and graph below

Venture capitalist rated the importance of regional features as used in evaluating investment proposals. All the region specific factors have been rated high by venture capitalist. The most important one being the distance from the office of venture capitalist and the least important being stability in policies. Venture capitalist also rated the region specific factors in Uttar Pradesh. As can be seen in the table below, most of these factors have been ranked low for the state of Uttar Pradesh.

Table 5.22 Features of Region for Uttar Pradesh

	Features of Region	Average Rating Required	Average Rating in Uttar Pradesh
1	Close to office of venture capitalist	4.25	2.50
2	Clarity in the rules and regulations	3.31	2.62
3	Stability in policies	3.25	2.56
4	Infrastructure facilities project	3.44	2.40
5	Availability of trained manpower	3.50	2.68
6	Conducive law and order	3.81	2.81

Figure 5.7 Features of Region for Uttar Pradesh



Statistical Test

The following Statistical tests have been undertaken related to the Features of Region:

1. **Test of significance of attributes related to the Features of Region.**

   i. Attributes as required by Venture Capitalist-Have been tested and the results have been shown in the table below. All the attributes desired by venture capitalist have been found to be significant at 99 %level. The results are shown in the table below

Table 5.23 Test of significance: Regional attributes as required by Venture Capitalist

Test Value = 0		
	t	Sig. (2-tailed)
Distance	18.261	0.000
Clarity	12.289	0.000
Stability	13.000	0.000
Infrastructure	13.339	0.000
Manpower	14.491	0.000
Law	20.333	0.000

   ii. Attributes as presents in proposals from Uttar Pradesh-Have been tested and the results have been shown in the table below. All the attributes have been found to be significant at 99 %level. The results are shown in the table below.

Table 5.24: Test of significance: Regional attributes of Uttar Pradesh

Test Value = 0		
	t	Sig. (2-tailed)
Distance	12.247	0.000
Clarity	16.959	0.000
Stability	16.292	0.000
Infrastructure	15.497	0.000

Manpower	15.267	0.000
Law	17.173	0.000

2. **Significance test for differences in individual variables** between features of region required by Venture Capitalist and features of region present in proposals from Uttar Pradesh.

Based on the individual features of region the following null hypotheses were tested:

$H1_{e1o}$: There is no difference in the distance from office of venture capitalist in Uttar Pradesh and the distance from office as required by a venture capitalist.

$H1_{e2o}$: The clarity of rules and regulations in Uttar Pradesh is as per the requirement of venture capitalists.

$H1_{e3o}$: The stability of policies in Uttar Pradesh is as per the requirement of venture capitalists.

$H1_{e4o}$: The infrastructure facilities in Uttar Pradesh are as per the requirement of venture capitalists.

$H1_{e5o}$: The availability of trained manpower in Uttar Pradesh is as per the requirement of venture capitalists.

$H1_{e6o}$: The law and order in Uttar Pradesh is as per the requirement of venture capitalists.

Table 5.25: Summary of t-test results for the hypotheses based on the individual regional attributes.

$H1_{e1o}$	There is no difference in the distance from office of venture capitalist in Uttar Pradesh and the distance from office as required by a venture capitalist.	T= -12.00 P=0.000	Reject Null Hypothesis
$H1_{e2o}$	The clarity of rules and regulations in Uttar Pradesh is as per the requirement of venture capitalists.	T=-8.57 P=0.000	Reject Null Hypothesis
$H1_{e3o}$	The stability of policies in Uttar Pradesh is as per the requirement of venture capitalists.	T=-4.44 P=0000	Reject Null Hypothesis

$H1_{e4o}$	The infrastructure facilities in Uttar Pradesh are as per the requirement of venture capitalists.	T=-4.37 P=0.001	Reject Null Hypothesis
$H1_{e5o}$	The availability of trained manpower in Uttar Pradesh is as per the requirement of venture capitalists.	T=-6.35 P=0.001	Reject Null Hypothesis
$H1_{e6o}$	The law and order in Uttar Pradesh is as per the requirement of venture capitalists.	T=-4.615 P=0.000	Reject Null Hypothesis

As can be seen from the table, all of the above hypotheses have been rejected at 99 % confidence level.

3. **Overall Significance test** for difference between features of region required by Venture Capitalist and features of region in proposals from Uttar Pradesh.

Null Hypothesis, $H1_{eo}$: There is no difference between the regional features of Uttar Pradesh and the regional features required by a venture capitalist.
Alternate hypothesis, $H1_e$: There is difference between the regional features of Uttar Pradesh and the regional features required by a venture capitalist.

Based on the data of this study, **Hypothesis 1_e** has been tested. The results are shown in the table below.

Table 5.26 Overall Significance Test: Regional Features

	N	Mean	Std. Deviation	t	Sig. (2-tailed
VC Features of Region	16	15.625	1.96	-12.10	0.00

The test results give the t-statistics of -12.10 and a p value of 0.000. As $p< 0.01$, the Null Hypothesis, $H1_{eo}$ (There is no difference between the regional characteristics of Uttar Pradesh and the regional features required by a venture capitalist) **is rejected** at 99% confidence level. Therefore, there is difference between the regional characteristics of Uttar Pradesh and the regional features required by a venture capitalist.

Comparison with previous studies

As per this study regional features are important in the evaluation of investment proposals also the presence of regional features in Uttar Pradesh is perceived to be low. The findings of previous studies on regional features are as follows:

Indian studies-In the Indian context a study was conducted by KPMG and TiE in the year 2007 on the perception of the current status of the key factors required for entrepreneurship development in individual states. The study considered the various regional factors (State specific factors) such as Governance, infrastructure and local environment. Under these categories factors such as Bureaucracy, Fiscal policy, Tax Administration, infrastructure facilities, incubation center, entrepreneur education, mentoring facilities and law and order situation were rated. Uttar Pradesh scored well, sometimes even higher than the national average on the above parameters. The high scores for the state of Uttar Pradesh have been attributed by the study due to the following:

1. Perception and expectations of the respondents might be conditioned by their experiences and expectations in their respective states. States such as Gujarat or Delhi can face the challenge of meeting much higher expectations compared to those from states like Uttar Pradesh.
2. The score for Uttar Pradesh can be attributed to a respondent base primarily consisting of NOIDA and Ghaziabad both of which are in the national capital region. The high score in Uttar Pradesh could be attributed to the 'NCR-effect', where a large chunk of development is been done in the National Capital Region (NCR).

Foreign studies - The role of spatial proximity for financial intermediaries in general has attracted significant attention in finance literature (Clark & Connor 1997). A number of foreign studies have focused on the role of geographical distance. Coval & Moskowitz (2001) highlighted the importance of physical distance for information gathering. Tian (2006) provides evidence that entrepreneurial firms located closer to their investing venture capitalists outperform other entrepreneurial firms because of better oversight. Gompers & Lerner (2005) studied the role of distance between the venture capitalist and the firm, presuming that that oversight is a function of cost. He

found out that firms located in regions where venture capitalist is far might face a relative scarcity or increase in cost of venture capital.

5.1.4. Role of Venture Capital in Economic Development

Venture Capitalist rated the importance of the following features related to the role, which Venture Capital can play in Economic Development for the state of Uttar Pradesh. Venture capitalist rated the following ways by which they can help by:

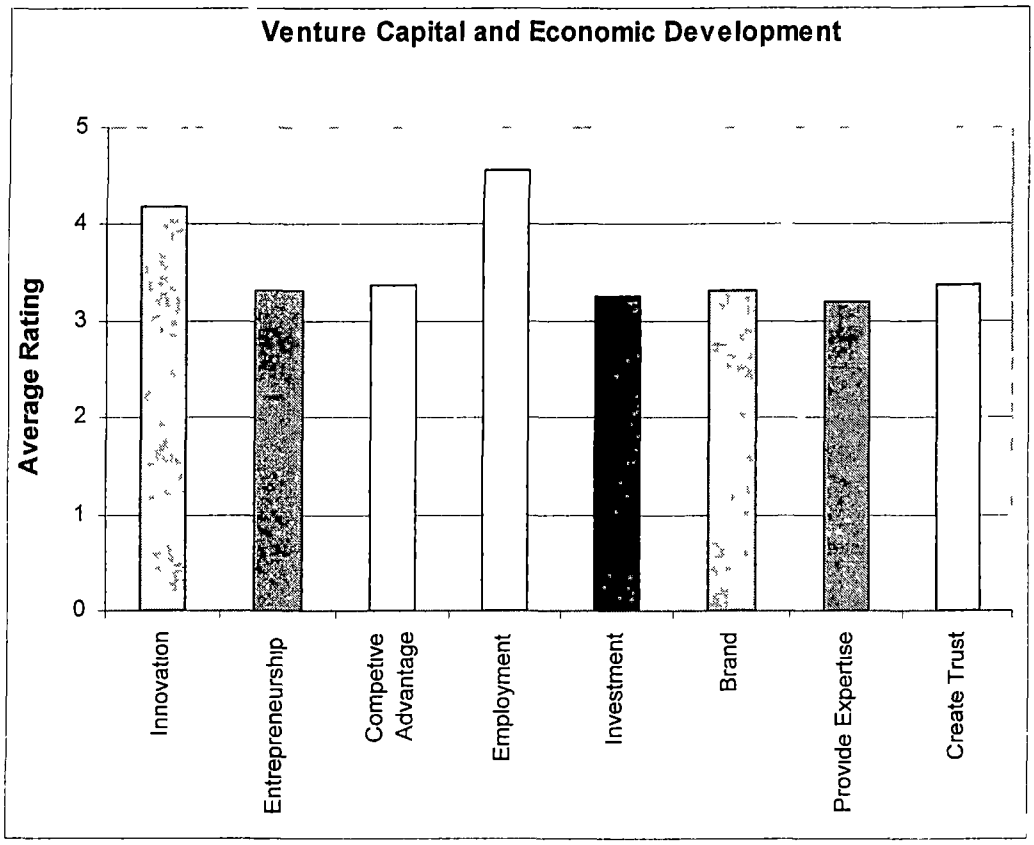
1. Spurring innovation
2. Boosting entrepreneurship
3. Helping in identifying areas where Uttar Pradesh has a competitive advantage
4. Generating employment
5. Attracting investments from other sources
6. Improving the brand image of Uttar Pradesh
7. Advising government to formulate policies to promote industrialization
8. Creating a trust amongst entrepreneurs of other states and countries to invest in Uttar Pradesh

The results of responses from the venture capitalist are shown the in the figure and table below:

Table 5.27 Role of Venture Capital in Economic Development

	Features	Average
1	Spur Innovation	4.18
2	Boost Entrepreneurship	3.31
3	Identify areas where Uttar Pradesh has a competitive advantage	3.37
4	Generate employment	4.56
5	Attracting investments from other sources	3.25
6	Improve brand image of Uttar Pradesh	3.31
7	Help government to formulate policies to promote industrialization	3.19
8	Create a trust amongst entrepreneurs of other states and countries to invest in Uttar Pradesh	3.37

Figure 5.8 Role of Venture Capital in Economic Development



All the factors were rated as important. The ability of venture capital to generate employment, spur innovation, help in identifying areas where Uttar Pradesh has a competitive advantage and the ability of Venture Capitalist to create a trust amongst entrepreneurs of other states and countries to invest in Uttar Pradesh were rated the highest by venture capitalist. While the role of venture capitalist in advising government in policy formulation and helping in attracting investments from other sources were rated lowest.

The following statistical tests have been undertaken related to the role of venture capital in economic development of Uttar Pradesh:

1. **Test of significance of attributes related to the Role of Venture Capital in Economic Development of Uttar Pradesh.**

Attributes as perceived by Venture Capitalist have been tested and the results have been shown in the table below. All the attributes perceived by venture capitalist have been found to be significant at 99% level. The results are shown in the table below.

Table 5.28 Test of significance: Attributes of economic development as perceived by Venture Capitalist.

Test Value = 0		
	t	Sig. (2-tailed)
Innovation	20.080	0.000
Entrepreneurship	15.174	0.000
Competitiveness	11.765	0.000
Employment	25.088	0.000
Investments	15.181	0.000
Branding	11.640	0.000
Expertise	12.996	0.000
Trust	12.410	0.000

2. Overall significance test for role of venture capital in promoting economic development in Uttar Pradesh.

Null Hypothesis, $H2_{ao}$: Venture capital funding will make no difference in promoting economic development in Uttar Pradesh.

Alternate hypothesis, $H2_a$: Venture capital funding can promote economic development in Uttar Pradesh.

Based on the data collected from venture capitalist through question no.4, the above hypothesis has been tested. The results of the test are shown in the table below

Table 2.29 Overall Significance Test: Role of Venture Capital in promoting Economic Development

	N	Mean	Std. Deviation	t	Sig. (2-tailed
$VC_{\text{Economic Development}}$	16	28.56	5.4	3.915	0.001

The test results give the t-statistics of 3.915 the corresponding two-tailed p value is 0.001.As P< 0.01, the null Hypothesis, $\mathbf{H2_{ao}}$ (Venture capital funding will make no difference in stimulating economic development in Uttar Pradesh), is **rejected at 95 % confidence level.** Therefore Venture capital funding help promote economic development of Uttar Pradesh.

5.1.5. Role of Venture Capital in Industrial Development:

Venture Capitalists were asked to rate the role, which can be played by them in the industrial development of Uttar Pradesh. They rated the contribution which venture capital can provide in terms of the following features given below. Venture capital can help by:

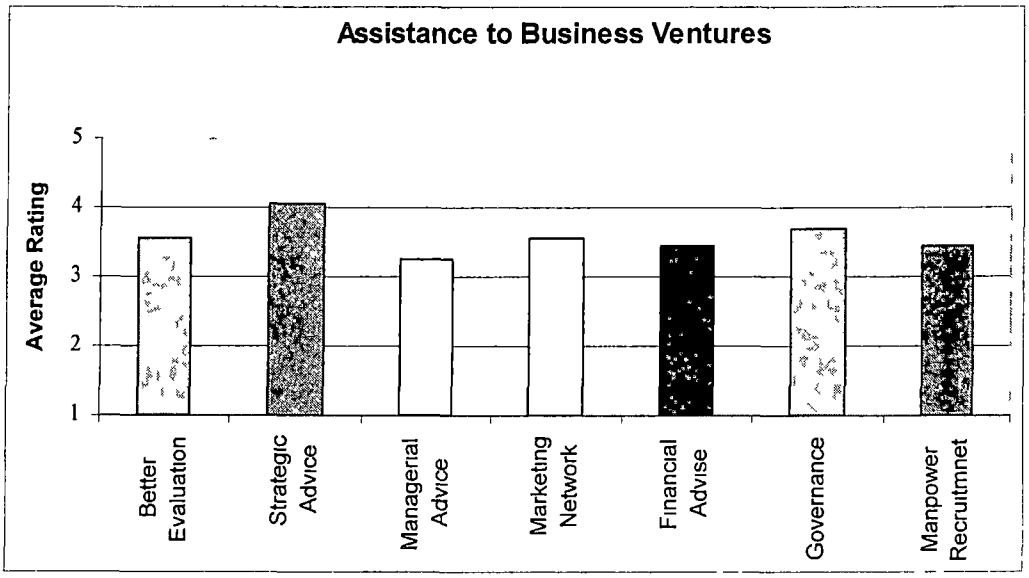
1. Better evaluation of projects.
2. Providing strategic advice
3. Providing managerial advice
4. Expanding marketing networks
5. Better management of financial resources
6. Instilling better governances
7. Assisting in manpower recruitment training

The results are shown the in the tables and graph given below. They indicate that the strategic role of venture capitalist is the most important way by which they can assist in industrial development of Uttar Pradesh.

Table 5.30 Role of Venture Capital in industrial development of Uttar Pradesh

	Contribution of Venture Capitalist	**Average Rating**
1	Better evaluation of projects	3.56
2	Providing Strategic advice	4.06
3	Providing managerial advice	3.25
4	Expanding marketing networks	3.56
5	Better management of financial resources	3.43
6	Instill better governance	3.69
7	Assisting in manpower recruitment	3.44

Figure 5.9 Role of Venture Capital in Industrial Development of Uttar Pradesh



The following Statistical test have been undertaken related to the Role of venture capital in assisting business ventures in Uttar Pradesh

1. Test of significance of attributes related to the role of venture capital in Industrial Development of Uttar Pradesh

Attributes as perceived by Venture Capitalist have been tested and the results have been shown in the table below. All the attributes perceived by venture capitalist have been found to be significant at 99 %level. The results are shown in the table below

Table 5.31 Test of significance: Attributes of Industrial Development as perceived by Venture Capitalist.

Test Value = 0		
	t	Sig. (2-tailed)
Evaluation	13.825	.000
Strategy	16.892	.000
Management	13.000	.000
Marketing	15.974	.000

Financial management	16.893	.000
Governance	18.596	.000
Manpower	17.507	.000

2. Overall Significance test for role of venture capital in assisting business ventures in Uttar Pradesh.

Based on the above data **Hypothesis 2_b** has been tested.

Null Hypothesis, $H2_{bo}$: Venture capital funding will make no difference in making industrial unit in Uttar Pradesh more competitive.

Alternate hypothesis, $H2_b$: Venture capital funding will make industrial unit in Uttar Pradesh more competitive

Based on the data collected from venture capitalist through question no.4 the above hypothesis has been tested. The results of the test are shown in the table below:

Table 5.32 Overall Significance Test: Role of venture capital in promoting Industrial Development

	N	Mean	Std. Deviation	t	Sig. (2-tailed
VC Industrial Development	16	24.75	3.89016	4.216	0.009

The test results give the t-statistics of 4.216 the corresponding two-tailed p value is 0.009.As P<0.01, the Null Hypothesis, $H2_{b0}$, (Venture capital funding will make no difference in making industrial unit in Uttar Pradesh more competitive) **is rejected at 95 % confidence level.** Therefore venture capital funding will make industrial units in Uttar Pradesh more competitive.

Comparison with previous studies

The results of this study are in line with previous studies, venture capitalist feel that due to their expert advice and active participation they can help in the development of

Uttar Pradesh. The literature review (section 3.1) gives a detailed account of the developmental role played by venture capital.

5.1.6. Role of Government in promoting venture capital

Venture Capitalist were asked to rate the role which can be played by government of Uttar Pradesh in promoting venture capital in the state. They rated the contribution which government can provide in terms of the following;

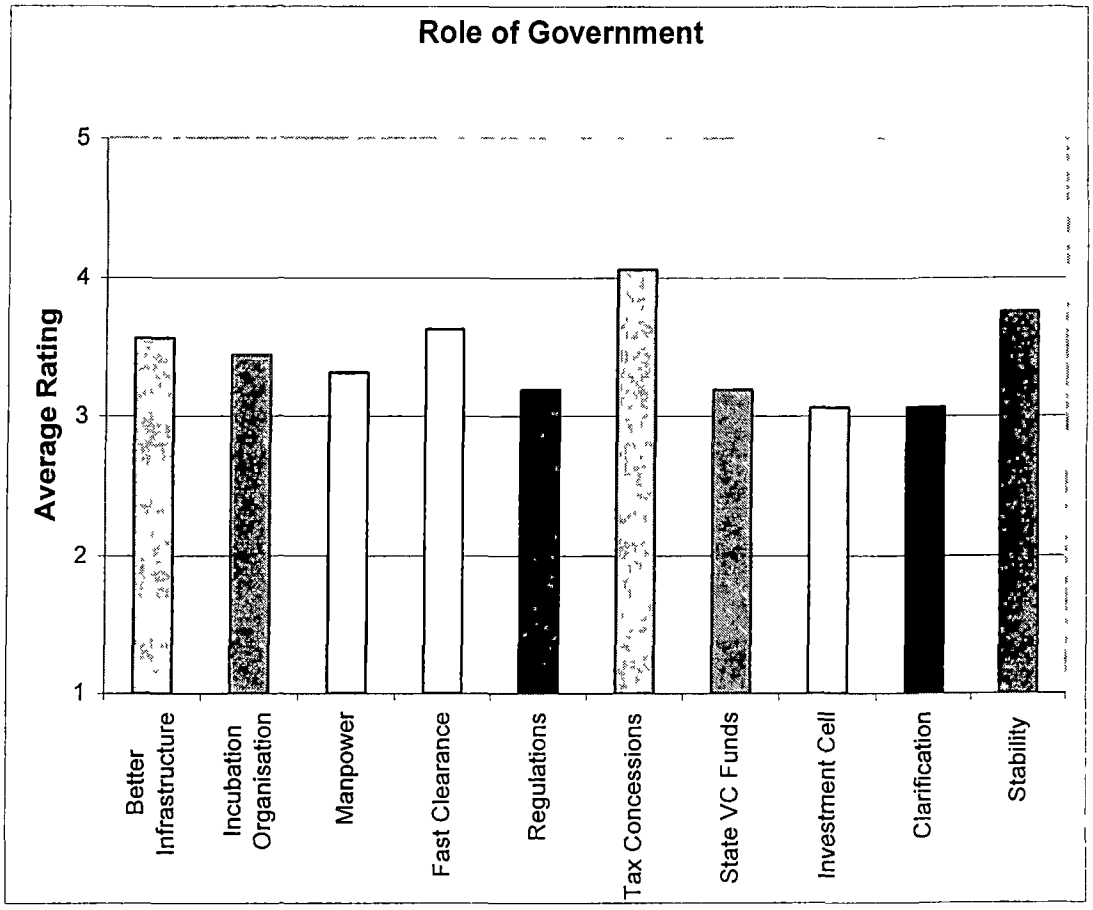
1. Providing better infrastructure
2. Establishing incubation organizations
3. Improving manpower issues
4. Faster clearance of investment proposals
5. Simplifying regulatory and legal issues
6. Providing tax concessions
7. Establishing State dedicated venture capital fund
8. Establishing special cell to oversee venture capital investments
9. Clarifying the policies and procedures
10. Ensuring stability in policies and procedures

The results are shown the in the table and graph below, which indicate that government can help promote venture capital in a number of ways

Table 5.33 Role of Government in Promoting Venture Capital

	Role of Government	Average
1	By providing better infrastructure	3.56
2	Establishing incubation organizations	3.43
3	Improving manpower issues	3.31
4	Faster clearance of investment proposals	3.62
5	Simplifying regulatory and legal issues	3.18
6	Providing tax concessions	4.06
7	Establishing State dedicated Venture Capital Fund	3.19
8	Establishing special cell to oversee venture capital investments	3.06
9	Clarifying the policies and procedures	3.08
10	Ensuring stability in policies and procedures	3.75

Figure 5.10 Role of government in promoting venture capital



As per the perception of venture capitalist, the most important way through which the government can help is by providing tax concessions to venture capital investments.

Statistical Tests

The following Statistical test have been undertaken related to the role of government in promoting venture capital

1. **Test of significance of attributes related to the Role of Government in Promoting Venture Capital**

   i) Attributes as perceived by Venture Capitalist have been tested and the results have been shown in the table below. All the attributes as perceived by venture capitalist have been found to be significant at 99 % level. The results are shown in the table below.

Table 5.34 Test of significance: Attributes of Role of Government as perceived by Venture Capitalist

Test Value = 0		
	t	Sig. (2-tailed)
Better infrastructure	14.783	0.000
Incubation	16.893	0.000
Manpower	10.600	0.000
Clearances	16.383	0.000
Regulations	15.285	0.000
Tax	14.151	0.000
State Sponsored VC	10.923	0.000
Special Cell	18.013	0.000
Rules	18.013	0.000
Stability	13.328	0.000

2. Overall Significance test for the Role of Government in Promoting Venture Capital.

Null Hypothesis, $H3_0$: Government cannot promote venture capital funding in Uttar Pradesh

Alternate hypothesis, H3: Government can promote venture capital funding in Uttar Pradesh.

Based on the above data **Hypothesis 3** has been tested. The results have been shown in the table below

5.35 Overall Significance Test: Role of Government

	N	Mean	Std. Deviation	t	Sig. (2-tailed
VC Role of Government	16	34.875	6.55744	3.553	0.03

Test results give the t-statistics of 3.553 and the corresponding two-tailed p value is 0.03. As $P < 0.05$ but $P > 0.01$, the null Hypothesis, $H3_0$ (Government cannot promote venture capital funding in Uttar Pradesh), is rejected at 95% confidence level.

Comparison with previous studies- the findings of this study are in line with previous studies, Venture capitalist feel that Government can undertake a number of steps to promote venture capital funding in the state of Uttar Pradesh. The role of government in promotion of venture capital has been highlighted in various studies. Governments across the world have taken a number of initiatives to promote venture capital funding (as can be seen in table 3.4, chapter 3).

Also as discussed earlier in chapter 2, many Indian state governments have also played a role in promotion of venture capital by establishing state dedicated venture capital funds

5.1.7. Role of Syndication in promoting venture capital

Venture Capitalist were asked to rate the role which can be played by syndication in promoting venture capital in the state of Uttar Pradesh. They rated the contribution which venture capital syndication can provide in terms of:

1. Better evaluation of investment proposal
2. Sharing of risk
3. Sharing of profit/loss
4. Better management of venture
5. Providing signals that the venture is good

As can be seen from the graph and table given below, for the state of Uttar Pradesh venture capitalist gave importance to a number of benefits of syndication. In the perception of venture capitalist the most important factor was that syndication enables sharing of risk this was followed by a better management of venture through syndication. Sharing of profit and loss through syndication was perceived to be the least important.

Figure 5.11 Role of Syndication for Uttar Pradesh

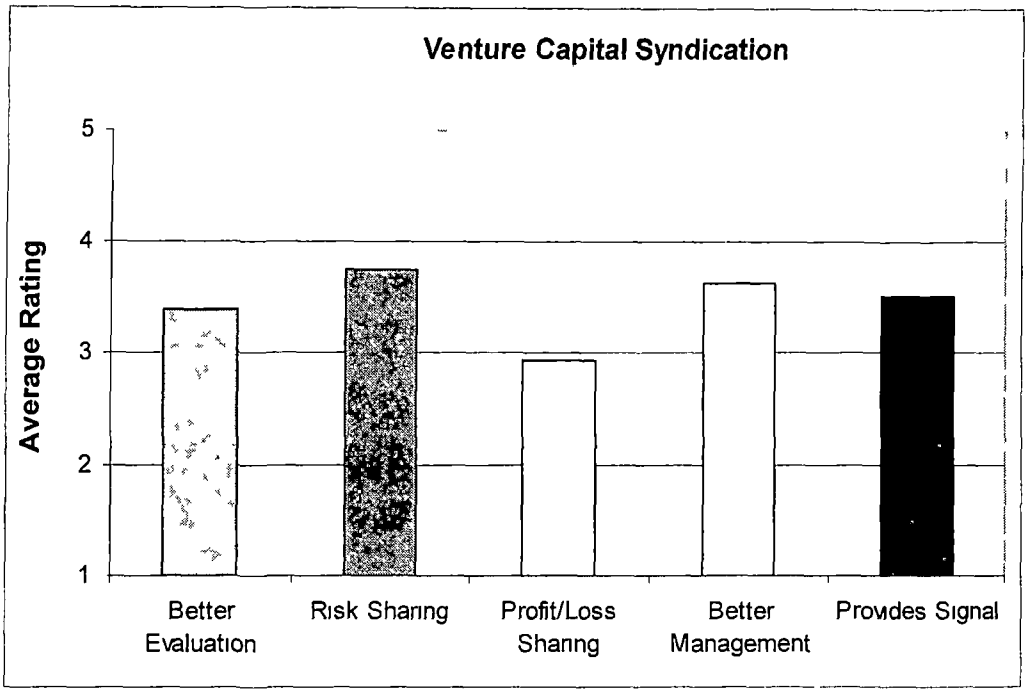


Table 5.36 Role of Syndication

	Features of Syndication	Average Rating
1	Better evaluation of investment proposal	3.37
2	Sharing of risk	3 75
3	Sharing of profit/loss	2.93
4	Better management of venture	3 62
5	Provides signals that the venture is good	3.50

Statistical Test

The following statistical tests have been undertaken related to the Role of Syndication in Promoting Venture Capital in the state of Uttar Pradesh.

1. **Test of significance of attributes related to the role of syndication in promoting Venture Capital in the state of Uttar Pradesh.**

Attributes as perceived by Venture Capitalist have been tested and the results have been shown in the table below. All the attributes as perceived by venture capitalist have been found to be significant at 99 % level. Results have been shown in the table below.

Table 5.37 Test of significance: Attributes of Syndication as perceived by Venture Capitalist

Test Value = 0		
	T	Sig. (2-tailed)
Evaluation	15.253	0.000
Sharing of Risk	17.146	0.000
Sharing of Profit/loss	15.222	0.000
Management	14.151	0.000
Signals	13.555	0.000

2. Overall Significance test for the role of syndication in promoting venture capital in Uttar Pradesh.

Null Hypothesis, $H4_0$: Syndication cannot promote venture capital funding in Uttar Pradesh.

Alternate hypothesis, H4: Syndication can promote venture capital funding in Uttar Pradesh.

Based on question no. 7, from venture capitalist, **Hypothesis 4** has been tested and results have been shown in the table below.

Table 5.38 Overall Significance Test: Role of Syndication

	N	Mean	Std. Deviation	t	Sig. (2-tailed
VC Syndication	16	17.1875	3.39	2.69	0.017

Test results give the t-statistics of 2.692 the corresponding two-tailed p value is 0.017.

As P<0.05 but P>0.01, the Null Hypothesis $H4_0$ (Syndication will make no difference in promoting venture capital funding in Uttar Pradesh) is **rejected at 95 % confidence level.**

Comparison of this study with previous studies

This study shows that venture capitalist consider syndication beneficial for investment in Uttar Pradesh As discussed in the literature review (section 3.4.5), a number of researchers have highlighted the benefits of syndication. Venture capitalists syndicate their investments with other venture capitalists to distribute risk, for seeking advice about the startup firm and to cross check on the investment decision (Gompers & Lerner, 1999). Venture capitalists may syndicate to share risk (Lockett & Wright, 2001). Venture capitalist also syndicates to improve decision-making by joint decisions (Lerner, 1994).

5.2. Analysis for data - Entrepreneurs in Uttar Pradesh

In this section the data obtained from the entrepreneurs is presented through tables and graphs after which the statistical test have been performed to test the various hypothesis.

5.2.1 Funds requirement of Entrepreneur

Entrepreneurs were asked whether they have a new innovation/technology/R&D for which they require funds. The responses are shown in the pie charts given below. Out of the total 386 respondents 187 (42%) require funds. Also all the entrepreneurs requiring funds feel that it would not be easy to raise funds for new ventures. The requirement of funds was grouped into the following categories, Up to Rs. 25 lakhs, Rs 25 lakhs to Rs 5 crores, Rs 5 crores to Rs 10 crores and above Rs 10 crores. As shown in the figure 5.12 below, the maximum number of respondent entrepreneur required between Rs 25 lakhs to Rs 5 crores, which was followed by up to Rs. 25 lakhs, Rs 5 crores to Rs 10 crores and Above Rs 10 crores respectively.

Figure 5.12 Fund required for new ventures

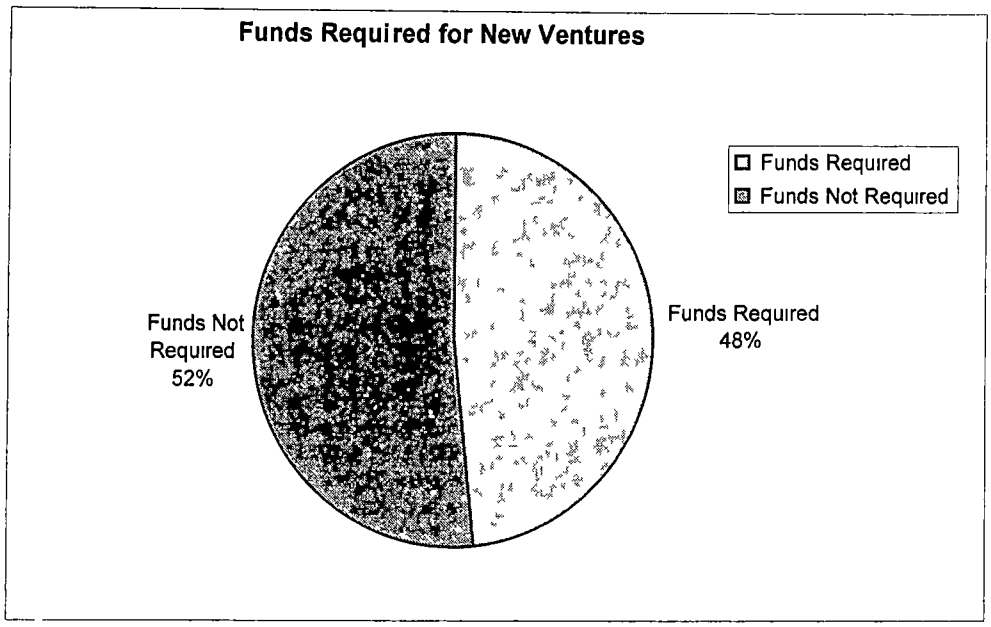
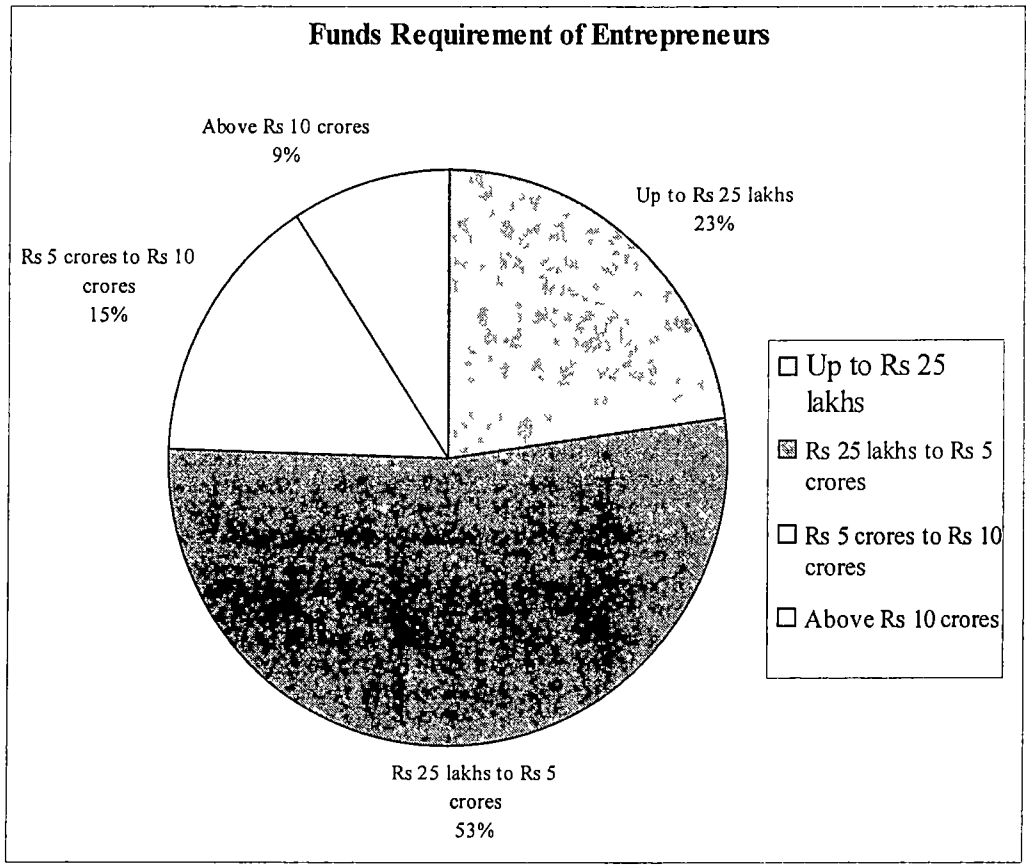


Figure 5.13 Amount of funds required



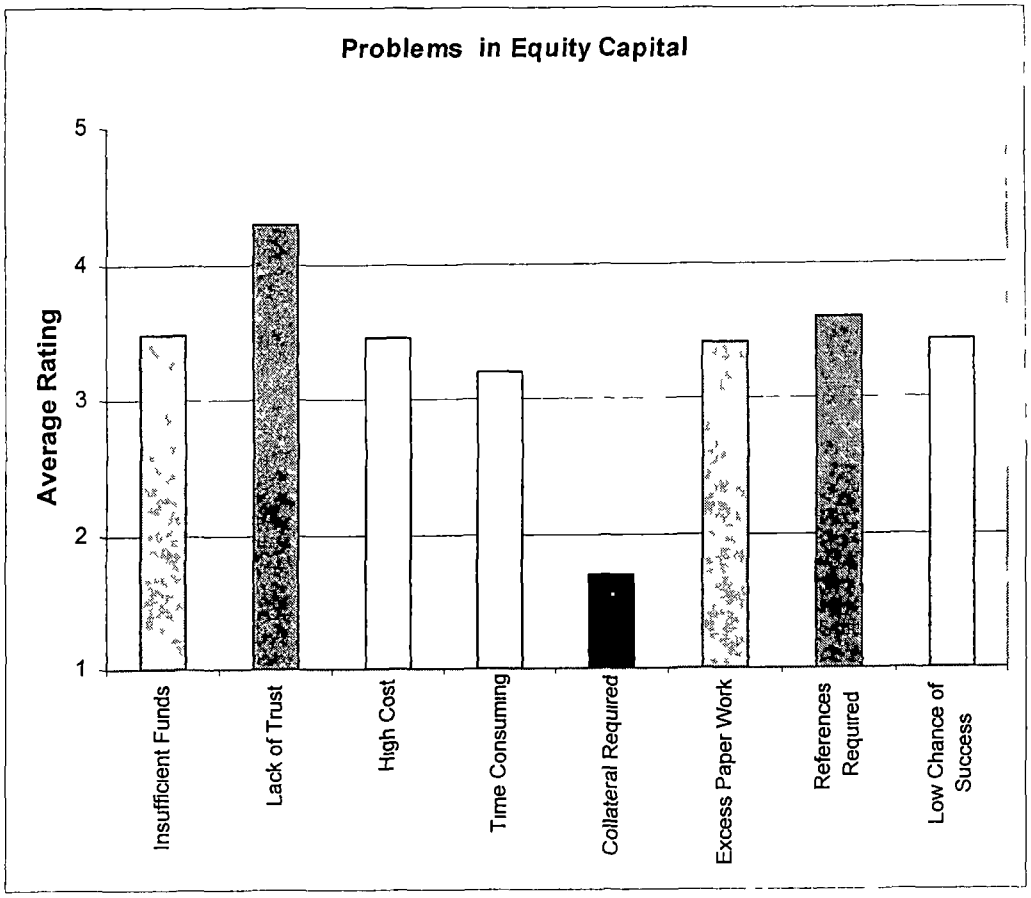
5.2.2 Methods and problems faced in raising funds

Entrepreneurs were asked whether they have raised equity and debt funds for their business. As per the responses all the entrepreneurs have raised funds for business through equity and debt capital and have faced problems in raising them. Entrepreneurs were then asked to rate the problems faced by them in equity and debt capital. The responses from the entrepreneurs are discussed in sections 5.2.2.1 and 5.2.2.2.

5.2.2.1. Problems in Equity Capital

Entrepreneurs were asked to rate the problems faced by them in raising equity capital. As shown in the graph given below entrepreneurs faced the maximum difficulty in convincing the providers of equity capital due to lack of trust. This was followed by the problems faced due to the need for references and the insufficiency of funds from equity capital.

Figure 5.14 Equity Capital -Problems faced by entrepreneurs in Uttar Pradesh



The responses of the problems faced in raising equity capital have also been shown in the table below.

Table 5.39 Equity Capital: Problems faced by Entrepreneurs of Uttar Pradesh

	Problems in equity capital	Average Rating
1	Funds are insufficient	3.48
2	Difficult to convince others as there is a lack of trust	4.29
3	Cost of fund is high	3.46
4	Process is time consuming	3.20
5	Collateral/Guarantee is required	1.70
6	Excessive paper work	3.41
7	Assurances are required	3.59
8	Chances of obtaining finance are low	3.42

Statistical Test

The following Statistical test have been undertaken related to the problems faced in raising equity capital by entrepreneurs in the state of Uttar Pradesh

1. **Test of significance of attributes** related to the problems faced in raising equity capital by entrepreneurs in the state of Uttar Pradesh

Attributes as perceived by entrepreneurs in the state of Uttar Pradesh have been tested and the results have been shown in the table below. All the attributes as perceived by entrepreneurs have been found to be significant at 99 %level. The results have been shown in table below

Table 5.40 Test of Significance: Attributes of problems faced in raising equity

Test Value = 0		
	T	Sig. (2-tailed)
Insufficient	50.712	0.000
Trust	78.024	0.000

Cost	119.527	0.000
Time	87.685	0.000
Collateral	140.961	0.000
Formalities	99.807	0.000
References	111.643	0.000
Success	120.456	0.000

2. **Overall Significance test for the problems faced in raising equity capital by entrepreneurs in the state of Uttar Pradesh**

Null hypothesis, $H5_{ao}$: Entrepreneurs in Uttar Pradesh do not face problems in raising equity capital.

Alternate hypothesis, $H5_a$. Entrepreneurs in Uttar Pradesh face problems in raising equity capital.

Based on the data of question no.3 (a), for the entrepreneurs, the above Hypothesis 5_a is tested and results have been shown in table below.

Table 5.41 Overall Significance Test: Problems in Equity Capital

	N	Mean	Std. Deviation	t	Sig. (2-tailed
P_{Equity}	386	26.54	3.17	15.73	/ 0.000

Test results give the t-statistics of 15.73 and the corresponding two-tailed p value is 0.000. As P<0.01, the null hypothesis, $H5_{ao}$ Entrepreneurs in Uttar Pradesh do not face problems in raising equity capital is **rejected at 99 % confidence level**. Therefore entrepreneurs in Uttar Pradesh face problems in raising equity capital

5.2.2.2. Problems in Debt Capital

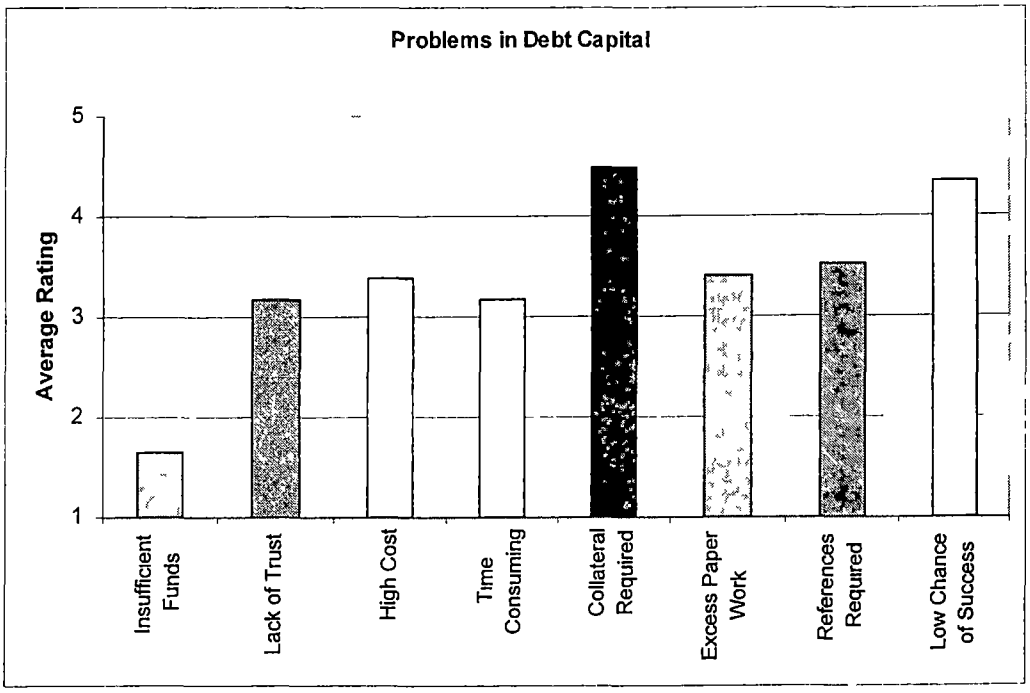
Entrepreneurs were asked to rate the problems faced in raising debt capital. The responses are shown in the table below. Entrepreneurs in Uttar Pradesh face the maximum problems due to requirement of collateral. This is followed by problems faced due to a low chance of obtaining debt capital for business. Insufficiency of funds for business does not pose a problem faced in raising debt capital.

Table 5.42 Debt Capital -Problems faced by Entrepreneurs in Uttar Pradesh

	Problems in Debt Capital	Average Rating
1	Insufficient Funds	1.66
2	Difficult to convince as there is a lack of trust	3.18
3	Cost of fund is high	3.38
4	Process is time consuming	3.18
5	Collateral/Guarantee is required	4.49
6	Excessive paper work	3.41
7	References/Assurances are required	3.51
8	Chances of obtaining finance are low	4.35

The responses from entrepreneurs have been depicted in the table below

Figure 5.15 Debt capital -Problems faced by entrepreneurs in Uttar Pradesh



The following Statistical test have been undertaken related to the problems faced in raising debt capital by entrepreneurs in the state of Uttar Pradesh

1. **Test of significance of attributes** related to the problems faced in raising debt capital by entrepreneurs in the state of Uttar Pradesh

Attributes as perceived by entrepreneurs in the state of Uttar Pradesh have been tested and the results have been shown in the table below. All the attributes as perceived by entrepreneurs have been found to be significant at 99 % level. The results have been shown in table below.

Table 5.43 Test of significance: Attributes of problems faced in raising debt

Test Value = 0		
	T	Sig. (2-tailed)
Insufficient	91.798	0.000
Trust	99.640	0.000
Cost	105.511	0.000
Time	86.859	0.000
Collateral	48.025	0.000
Formalities	99.830	0.000
References	104.882	0.000
Success	121.345	0.000

2. **Overall Significance test for the problems faced in raising debt capital by entrepreneurs in the state of Uttar Pradesh.**

Null hypothesis, $H5_{bo}$: Entrepreneurs in Uttar Pradesh do not face problems in raising debt capital.

Alternate hypothesis, 5_b: Entrepreneurs in Uttar Pradesh face problems in raising debt capital.

Based on the data of question no.3 (b), for the entrepreneurs, the above Hypothesis 5_b has been tested and results have been shown in table below.

Table 5.44 Overall Significance Test: Problems in Debt Capital

	N	Mean	Std. Deviation	t	Sig. (2-tailed
P_{Debt}	386	27.14	3.18	19.38	0.000

The test results give the t-statistics of 19.38, the corresponding two-tailed p value is 0.000.As P<0.01, the Null hypothesis, $H5_{bo}$ (Entrepreneurs in Uttar Pradesh do not face problems in raising debt capital) **is rejected at 99 % confidence level**. Therefore entrepreneurs in Uttar Pradesh face problems in raising debt capital.

5.2.3 Chi-Squares Test and ANOVA for Problems faced in raising Equity and Debt capital.

Further statistical test have been performed on the data obtained from question no.3 (a) and (b), from the entrepreneurs. Based on which hypothesis **5_c, 5_d, 5_e and 5_f have been tested.**

1. **Difference between problems faced in raising Equity and Debt capital.**

   Null hypothesis, $H5_{co}$: Entrepreneurs in Uttar Pradesh face no significant difference between problems in raising equity capital and problems in raising debt capital.

   Alternate hypothesis, $H5_c$. Entrepreneurs in Uttar Pradesh face significant difference between problems in raising equity capital and the problems faced in raising debt capital.

Chi-Square Test is undertaken to ascertain if there are differences between problems faced in raising equity capital and problems faced in raising debt capital. The results are shown in the table below.

Table 5.45 Chi-Squares Test: Equity and Debt Capital

	Value	Sig. (2-sided)
Pearson Chi-Square	0.079	0.779

The Pearson Chi Square shows a value of 0.079, the corresponding p value is 0.779. As the p value obtained is higher than the 0.05, the null hypothesis $\mathbf{5}_{co}$ (Entrepreneurs in Uttar Pradesh face no significant difference between problems in raising equity capital and problems in raising debt capital) stands vindicated. Therefore, there is no significant difference between problems in raising equity capital and problems in raising debt capital.

2. **Age of entrepreneur and the Problems faced in raising Equity and Debt capital.**

   a) **Null hypothesis, $H5_{d1o}$**: The problems faced in raising equity capital does not differs age- wise.

   Alternate hypothesis, $H5_{d1}$: The problems faced in raising equity capital differs age-wise.

   b) **Null hypothesis, $H5_{d2o}$**: The problems faced in raising debt capital does not differs age- wise.

   Alternate hypothesis, $H5_{d2}$: The problems faced in raising debt capital differs age- wise.

ANOVA test has been undertaken to ascertain if there are differences between the various age groups of entrepreneurs in state of Uttar Pradesh with regards to problems faced in raising equity capital and problems faced in raising debt capital. The results are shown in the table below.

Table 5.46 ANOVA: Age and problems faced in raising capital

ANOVA

	F	Sig.
$VC_{\text{Problem Equity}}$	0.892	0.445
$VC_{\text{Problem debt}}$	0.639	0.590

It can be seen from the above table that

1. Problem Faced in Raising Equity, p=0.445,F=0.892
2. Problem Faced in Raising Debt, p=0.590,F=0.639

As in the above cases the value of p > 0.05, therefore Null hypotheses, $H5_{d1o}$ and $H5_{d2o}$ stand vindicated. Therefore, the problems faced in raising equity and debt capital and are same for entrepreneurs of all age groups in Uttar Pradesh.

3. **Location of Entrepreneurs and problems faced in raising capital**

   a. **Null hypothesis,** $H5_{e1o}$: The problems faced in raising equity capital does not differ location wise.

      Alternate hypothesis, $H5_{e1}$: The problems faced in raising equity capital differs location wise.

   b. **Null hypothesis,** $H5_{e2o}$: The problems faced in raising debt capital does not differ location wise.

      Alternate hypothesis, $H5_{e2}$: The problems faced in raising debt capital differs location wise.

ANOVA has been performed to ascertain whether differences are there in the problems faced by entrepreneur with regards to their location (district). The results are shown in the table below.

Table 5.47 ANOVA: Location and problems faced in raising capital

ANOVA

	F	Sig.
VC Problem Equity	1.127	0.346
VC Problem debt	0.986	0.435

The results of above table show that

1. For equity capital, p=0.346. As p> 0.05, the null hypothesis stands vindicated.
2. For debt capital, p=0.435. As p>0.05, the null hypothesis stands vindicated.

For both equity and debt capital the problems faced does not differ location-wise for entrepreneurs of all locations (districts) in Uttar Pradesh.

4. **Gender of entrepreneur and the problems faced in raising equity and debt capital.**

a. **Null hypothesis, $H5_{f1o}$:** Problems faced in raising equity capital does not differs gender wise.

   Alternate hypothesis, $H5_{f1}$: Problems faced in raising equity capital differs gender wise.

b. **Null hypothesis, $H5_{f2o}$:** Problems faced in raising debt capital does not differs gender wise.

   Alternate hypothesis, $H5_{f2}$: Problems faced in raising debt capital differs gender wise.

ANOVA has been performed to ascertain whether differences are there in the problems faced by entrepreneur with regards to their gender. The results are shown in the table below.

Table 5.48 ANOVA: Gender and problems faced in raising capital

ANOVA

	F	Sig.
VC Problem Equity	0.423	0.516
VC Problem debt	0.463	0.497

The results of above table show that

1. For equity capital, p=0.516. As p> 0.05, the null hypothesis stands vindicated.
2. For debt capital, p=0.497. As p>0.05, the null hypothesis stands vindicated.

Therefore, problems faced in raising both equity and debt capital does not differ gender-wise for entrepreneurs in Uttar Pradesh.

Comparison with previous studies

This study finds that entrepreneurs while raising capital in Uttar Pradesh face a number of problems. Many studies have been conducted on the problems faced by entrepreneurs in raising funds. Researchers like Jensen & Mecklings (1976) have advanced the agency, they have demonstrated that conflict between the managers and investors can affect the problems faced by entrepreneurs in raising funds. The difficulties faced by entrepreneurs have been sorted out into four critical factors by Gompers & Lerner (2005).

1. Uncertainty- in the potential outcomes for a company or a project. The wider the dispersion more is the uncertainty. Uncertainty could be due to reasons such as; whether the research program or new product will succeed, what will be the response of rival firms. Because of uncertainty the entrepreneur faces problems in raising funds.
2. Asymmetric information-as the entrepreneur is involved in the day-to-day action he knows more about the company's prospects than the investors. Investors are worried that entrepreneur may take actions that are in his self-interest and it becomes difficult to distinguish between good and bad entrepreneur. Fearing such actions from the entrepreneurs the investors hesitate to invest.
3. Nature of firm's assets-firms that have tangible assets such as land, machinery may find it easier to raise funds. But when the assets are intangible it becomes relatively difficult to raise funds.
4. Conditions in the relevant financial and product market-if there is an intense competition or a great deal of market uncertainty about the size of the potential market, firms may find it difficult to raise capital.

Apart from the above researcher a number of studies (refer literature review) have also highlighted the problems faced by entrepreneurs in raising funds.

5.2.4. Problems faced in Venture Capital

Entrepreneur of Uttar Pradesh were asked whether they have heard of venture capital and if so have they approached a venture capitalist for funding. Out of 386 respondents 229 respondents had heard of venture capital. These 229 respondent entrepreneurs rated the problems they faced/perceived with venture capital.

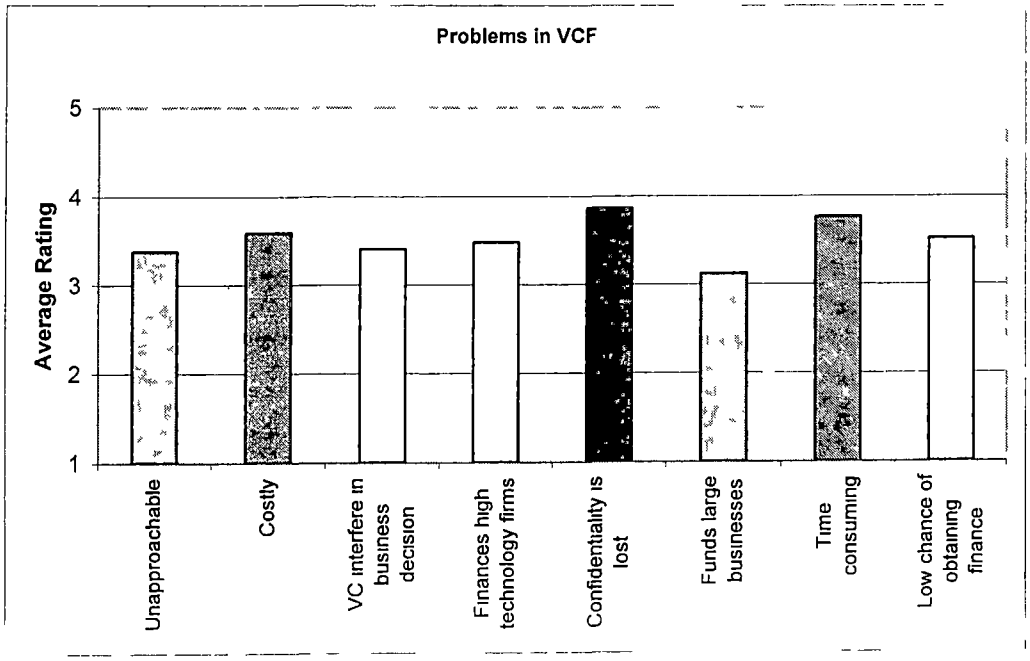
Table 5.49 Problems faced by Entrepreneurs of Uttar Pradesh in raising venture capital

	Problems faced in venture capital	Average Rating
1	Venture capitalist are unapproachable	**3.38**
2	Venture capital is a costly source of raising capital	**3.59**
3	Venture Capitalist interfere in business decisions	**3.41**
4	Venture capital finances only high technology firms	**3.48**

5	Confidentiality is lost	**3.86**
6	Funds requirement are too small for Venture Capital funding	**3.12**
7	Negotiations with venture capitalist are time consuming	**3.76**
8	Chances of obtaining finance from are low	**3.52**

As can be seen from the table shown above, entrepreneurs face a number of problems from venture capitalist. The top most problems rated by entrepreneurs were as follows; entrepreneurs have to share their business plans and strategies with venture capitalist, the time consumed in negotiations is too long and entrepreneurs consider venture capital as a costly source of funding.

Figure 5.16 Problems in venture capital



The responses from entrepreneurs have also been depicted in the table below.

Statistical Test

The following Statistical test have been undertaken related to the problems faced/perceived in raising venture capital by entrepreneurs in the state of Uttar Pradesh:

1. Test of significance of attributes related to the problems faced in raising venture capital by entrepreneurs in the state of Uttar Pradesh.

2. Overall significance test for the problems faced in raising venture capital by entrepreneurs in the state of Uttar Pradesh.
3. Test of age wise (of entrepreneur) differences in problems faced in raising venture capital.
4. Test of location wise (district) differences in the problems faced in raising venture capital.
5. Test of gender wise (of entrepreneur) differences in the problems faced in raising venture capital.

Data for the above test was obtained through question number 4, from the entrepreneurs of Uttar Pradesh. The results of the above test are as follows:

1. **Test of significance of attributes**

   Attributes as perceived by entrepreneurs in the state of Uttar Pradesh have been tested and the results have been shown in the table below. All the attributes as perceived by entrepreneurs have been found to be significant at 99% level. The results of test are shown in the table below

Table 5.50 Test of Significance: Attributes of problems faced in raising Venture Capital

Test Value = 0		
	t	Sig. (2-tailed)
Unapproachable	23.518	.000
Costly	29.445	.000
Interference	27.946	.000
High-tech	20.054	.000
Confidentiality	27.383	.000
Size	23.263	.000
Time	28.875	.000
Success	22.201	.000

2. **Overall Significance test for the problems faced in raising venture capital by `entrepreneurs in the state of Uttar Pradesh.**

Null Hypothesis, $H6_{ao}$: Entrepreneurs in Uttar Pradesh do not face problems in raising venture capital.

Alternate Hypothesis, $H6_a$: Entrepreneurs in Uttar Pradesh face problems in raising venture capital.

The results of test are shown in the table below

Table 5.51 Overall Significance Test: Problems in Venture Capital

	N	Mean	Std. Deviation	T	Sig. (2-tailed
$P_{\text{Venture Capital}}$	229	28.10	4.04	5.46	0.00

The test results give the t-statistics of 5.46 and the corresponding two-tailed p value is 0.000.As $p<0.01$, the Null Hypothesis, $H6a_0$ (Entrepreneurs in Uttar Pradesh do not face problems in raising venture capital) is rejected at 99 % confidence level. Therefore Entrepreneurs in Uttar Pradesh do face problems in raising venture capitalist.

Comparison with previous studies

As discussed in the literature review (section 3.4) there are a number of issues in venture capital funding. These issues have to address before funding can take place, this causes problems for the entrepreneurs seeking venture capital funding. The present study is in line with the previous studies and it shows that entrepreneurs in Uttar Pradesh also face/perceive problems in raising venture capital.

3. Age of entrepreneur and the Problems faced in raising venture capital.

Null hypothesis, $H6_{bo}$: For the entrepreneurs of Uttar Pradesh the problems faced in raising venture capital does not differ age-wise.

Alternate hypothesis $H6_b$: For the entrepreneurs of Uttar Pradesh the problems faced in raising venture capital differs age-wise.

ANOVA has been performed to ascertain whether differences are there in the problems faced by entrepreneur in raising venture capital with regards to their age. The results of test are shown in the table below.

Table 5.52 ANOVA: Age and problems in Venture Capital

ANOVA

	F	Sig.
VC Age and Problem	0.423	0.516

The ANOVA test gives the following values, F=0.423, p=0.516. As p>0.05, the above hypothesis $H6_{bo}$ (For the entrepreneurs of Uttar Pradesh the problems faced in raising venture capital do not differ age-wise) stands vindicated.

4. Location-wise problems in venture capital

Null hypothesis, $H6_{co}$: For the entrepreneurs of Uttar Pradesh the problems faced in raising venture capital does not differ location-wise.

Alternate hypothesis $H6_c$: For the entrepreneurs of Uttar Pradesh the problems faced in raising venture capital differs location-wise.

ANOVA has been performed to ascertain whether differences are there in the problems faced by entrepreneur in raising venture capital with regards to their location. The results of test are shown in the table below.

Table 5.53 ANOVA: Location and problems in Venture Capital

ANOVA

	F	Sig.
VC Location and Problem	1.384	0.221

The ANOVA test gives the following values, F=1.384 and p=0.221. As p>0.05, the above hypothesis, $H6_{0c}$ (For the entrepreneurs of Uttar Pradesh the Problems faced in raising venture capital does not differ district-wise) stand vindicated.

5. Gender-wise problems in venture capital

Null hypothesis, $H6_{do}$: For the entrepreneurs of Uttar Pradesh the problems faced in raising venture capital does not differ gender-wise.

Alternate hypothesis $H6_d$: For the entrepreneurs of Uttar Pradesh the problems faced in raising venture capital differs gender-wise.

ANOVA has been performed to ascertain whether differences are there in the problems faced by entrepreneur in raising venture capital with regards to their gender. The results of test are shown in the table below.

Table 5.54 ANOVA: Gender and problems in Venture Capital

ANOVA

	F	Sig.
VC Gender and Problem	1.639	0.201

The ANOVA test gives the following values, F=1.639, p=0.201. As p>0.05, hypothesis, $\mathbf{H6_{do}}$ (For the entrepreneurs of Uttar Pradesh the problems faced in raising venture capital does not differ gender-wise) stands vindicated.

5.2.5. Financial and non-financial assistance provided by venture capitalist

Entrepreneurs were asked to rate the importance of the financial and non-financial assistance that can be provided by a venture capitalist.

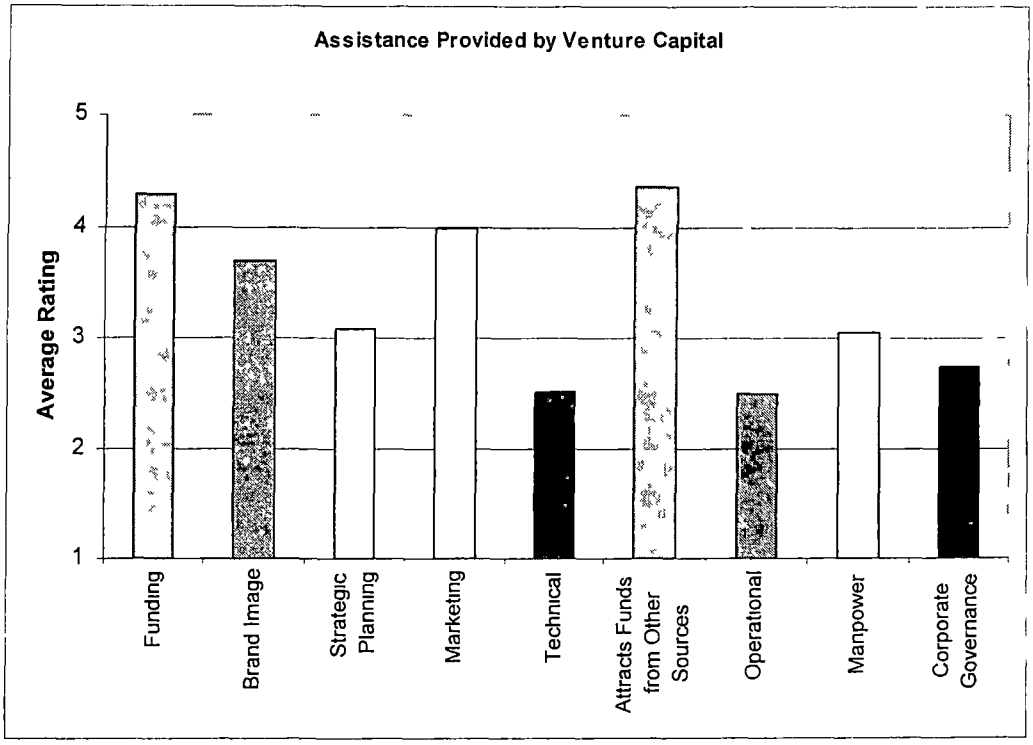
As can be seen from the table below, entrepreneurs in Uttar Pradesh give importance to the various types of help, which a Venture Capitalist can provide for their business.

Table 5.55 Assistance provided by Venture Capitalist

	Assistance provided by venture capitalist	Average Rating
1	Venture capital can provide funds for business	**4.29**
2	Venture capital can improve the brand image of your company	**3.70**
3	Venture capital provides help in strategic planning	**3.08**
4	Venture capital can provide help in marketing	**3.99**
5	Venture capital fund can provide technical assistance	**2.52**
6	Venture capital fund can help in raising finance from other sources	**4.35**
7	Venture capital fund can provide operational help	**2.49**
8	Venture capital fund can recruit and train manpower	**3.06**
9	Venture capital provides assistance to improve corporate governance	**2.74**

The financial and marketing help have been rated high while the technical and operational help has been rated low. The responses from entrepreneurs have also been depicted in the figure below

Figure 5.17 Assistance provided by venture capitalist



Statistical Test

The following Statistical tests have been undertaken related to the assistance that can be provided by venture capitalist to entrepreneurs in the state of Uttar Pradesh.

1. Test of significance of attributes related to the assistance, which can be provided by venture capitalist.
2. Overall Significance test for the assistance, which can be provided by venture capitalist.
3. Test of age wise (of entrepreneur) differences in assistance expected from, venture capitalist
4. Test of location wise (district wise) differences in the assistance that can be provided by venture capitalist to the entrepreneurs.
5. Test of gender wise (of entrepreneur) differences in the assistance, which can be provided by venture.

Data for the above test was obtained through question number 5, from the entrepreneurs of Uttar Pradesh. The results of the above test are as follows:

1. **Test of significance of attributes**

   Attributes as perceived by entrepreneurs in the state of Uttar Pradesh have been tested and the results have been shown in the table below. All the attributes as perceived by entrepreneurs have been found to be significant at 99 % level.

The results of test are shown in the table below

Table 5.56 Test of significance: Attributes of assistance expected from Venture Capitalist

Test Value = 0		
	T	Sig. (2-tailed)
Funding	122.584	0.000
Brand	95.794	0.000
Strategic	112.183	0.000
Marketing	55.354	0.000
Technical	58.262	0.000
Credibility	61.978	0.000
Operational	61.191	0.000
Manpower	51.354	0.000
Governance	53.262	0.000

2. **Overall Significance test for the assistance, which can be provided by venture capitalist**

Null hypothesis, $H7_{ao}$: Entrepreneurs in Uttar Pradesh do not expect non-financial assistance from venture capitalist.

Alternate hypothesis, $H7_a$: Entrepreneurs in Uttar Pradesh expect non-financial assistance from venture capitalist.

The results of test are shown in the table below

Table 5.57 Overall Significance Test: Assistance of venture capitalist

	N	Mean	Std. Deviation	T	Sig. (2-tailed
$VC_{Assistance}$	386	21.57	3.38	3.33	0.001

Test results give the t-statistics of 3.33 and p=0.001.As p<0.01, the null hypothesis, $H7a_0$ (Entrepreneurs in Uttar Pradesh do not expect non-financial assistance from venture capitalist) is rejected at 99 % confidence level. Therefore Entrepreneurs in Uttar Pradesh do expect non-financial assistance from venture capitalist.

3. Age of entrepreneur and assistance expected from Venture Capitalist

Null hypothesis, $H7_{bo}$: For the entrepreneurs of Uttar Pradesh the assistance expected from venture capitalist does not differ age-wise.

Alternate hypothesis $H7_b$: For the entrepreneurs of Uttar Pradesh the assistance expected from venture capitalist differs age-wise

ANOVA has been performed to ascertain whether the assistance expected from a venture capital differs with regards to the age of entrepreneurs. The results of test are shown in the table below.

Table 5.58 ANOVA: Age of entrepreneur and Assistance expected from Venture Capitalist

ANOVA

	F	Sig.
$VC_{Age\ and\ Assistance}$	2.655	0.048

The ANOVA test gives the following values, F=2.655 and p=0.048. As 0.01< p<0.05, the above hypothesis, $H7_{bo}$ (For the entrepreneurs of Uttar Pradesh the assistance

expected from Venture Capitalist do not differ age-wise), is rejected at 95% confidence level.

4. Location of entrepreneur and assistance expected from venture capitalist

Null hypothesis, $H7_{co}$: For the entrepreneurs of Uttar Pradesh the assistance expected from venture capitalist does not differ location-wise

Alternate hypothesis, $H7_{c}$: For the entrepreneurs of Uttar Pradesh the assistance expected from venture capitalist differs location-wise

ANOVA has been performed to ascertain whether differences are there in the assistance expected from venture capital with regards to their location. The results of test are shown in the table below.

Table 5.59 ANOVA: Location of entrepreneur and assistance from Venture Capital

ANOVA

	F	Sig.
VC Location and Assistance	0.609	0.723

The test gives F=0.609 and p=0.723. As p>0.05, Null hypothesis, $H7_{co}$ (For the entrepreneurs of Uttar Pradesh the assistance expected from venture capitalist does not differ location-wise) stands vindicated. Therefore there is no difference in the assistance expected from venture capitalist by entrepreneurs of different districts in Uttar Pradesh.

5. Gender and assistance from venture capitalist

Null hypothesis, $H7_{do}$: For the entrepreneurs of Uttar Pradesh the assistance expected from venture capitalist does not differ gender-wise

Alternate hypothesis, $H7_{d}$: For the entrepreneurs of Uttar Pradesh the assistance expected from venture capitalist differs gender-wise.

ANOVA has been performed to ascertain whether differences are there in the assistance expected from venture capital with regards to their gender. The results of test are shown in the table below.

Table 5.60 ANOVA: Gender of entrepreneur and assistance from Venture Capital

ANOVA

	F	Sig.
$VC_{\text{Gender and Assistance}}$	0.672	0.413

The test gives F=0.672 and p=0.413. As p >0.05, the null hypothesis, $H7_{do}$ (For the entrepreneurs of Uttar Pradesh the assistance expected from Venture Capitalist does not differ gender-wise) stands vindicated. Therefore there is no gender-wise difference in the assistance expected from venture capitalist by entrepreneurs Uttar Pradesh.

Comparison with previous studies

The literature review section 3.2 discusses the assistance provided by venture capital firms. This study is in line with previous studies as it finds that venture capitalist apart from just financing can also add value to a venture by providing a number of benefits. Hsu (2002) studied the price entrepreneurs are willing to pay to be associated with reputable venture capitalist. In his sample of 149 start-ups, he showed that high investor experience is associated with 15 percent discount in the relative firm valuation. The reason cited by him for the discount is the help other than financing which entrepreneurs expect from venture capitalist.

Summary of hypotheses and results

	No.	Hypothesis	Test	Value	Result
1	$H1_{ao}$	There is no difference between the characteristics of entrepreneurs in Uttar Pradesh and the characteristics of entrepreneurs required by a venture capitalist.	T-Test	T= -1.67 P=0.116	Accept Null Hypothesis
2	$H1_{a1o}$	There is no difference in the leadership qualities of entrepreneurs in Uttar Pradesh and the leadership qualities required by a venture capitalist.	T-Test	T=-0.549 P=0.591	Accept Null Hypothesis
3	$H1_{a2o}$	There is no difference in the integrity and commitment of entrepreneurs in Uttar Pradesh and the integrity and commitment as required by a venture capitalist.	T-Test	T= -1.211 P=0.224	Accept Null Hypothesis
4	$H1_{a3o}$	There is no difference in the long-term vision of entrepreneurs in Uttar Pradesh and the long-term vision as required by a venture capitalist.	T-Test	T=-2.702 P=0.016	Reject Null Hypothesis
5	$H1_{a4o}$	There is no difference in the commercial orientation of entrepreneurs in Uttar Pradesh and the commercial orientation as required by a venture capitalist.	T-Test	T=-0.436 P=0.66	Accept Null Hypothesis
6	$H1_{a5o}$	There is no difference in the technical expertise of entrepreneurs in Uttar Pradesh and the technical expertise as required by a venture capitalist.	T-Test	T=2.87 P=0.012	Reject Null Hypothesis
7	$H1_{a6o}$	There is no difference in the financial expertise of entrepreneurs in Uttar Pradesh and the financial expertise required by a venture capitalist.	T-Test	T=-0.76 P=0.457	Accept Null Hypothesis

8	$H1_{a7o}$	There is no difference in the market knowledge of entrepreneurs in Uttar Pradesh and the market knowledge as required by a venture capitalist.	T-Test	T=-1.23 P=0.234	Accept Null Hypothesis
9	$H1_{a8o}$	There is no difference in the team handling ability of entrepreneurs in Uttar Pradesh and the team handling ability required by a venture capitalist.	T-Test	T=-1.24 P=0.233	Accept Null Hypothesis
10	$H1_{bo}$	There is no difference between the characteristics of products and services in proposal from Uttar Pradesh and the characteristics of products and services required by a venture capitalist.	T-Test	T= -1.12 P=0.28	Accept Null Hypothesis
11	$H1_{b1o}$	The presence of uniqueness in product and services in investment proposals from Uttar Pradesh is as per the requirement of Venture Capitalist.	T-Test	T=-5.88 P=0.000	Reject Null Hypothesis
12	$H1_{b2o}$	The presence of product prototype in investment proposals from Uttar Pradesh is as per the requirement of Venture Capitalist.	T-Test	T=0.783 P=0.446	Accept Null Hypothesis
13	$H1_{b3o}$	The presence of patent in investment proposals from Uttar Pradesh is as per the requirement of Venture Capitalist.	T-Test	T=0.306 P=0.764	Accept Null Hypothesis
14	$H1_{b4o}$	The presence of superiority in products and services in investment proposals from Uttar Pradesh is as per the requirement of Venture Capitalist.	T-Test	T=2.218 P=0.042	Reject Null Hypothesis
15	$H1_{co}$	There is no difference between the characteristics of target market in proposal from Uttar Pradesh and the target market qualities required by a venture capitalist.	T-Test	T= -1.789 P=0.94	Accept Null Hypothesis
16	$H1_{c1o}$	There is no difference in the market size in proposal from Uttar Pradesh and	T-Test	T= -0.34	Accept Null

		the market size as required by a venture capitalist.		P=0.736	Hypothesis
17	$H1_{c2o}$	There is no difference in the market growth rate in proposal from Uttar Pradesh and the market growth rate as required by a venture capitalist.	T-Test	T= -1.934 P=0.071	Accept Null Hypothesis
18	$H1_{c3o}$	There is no difference in the market competition in proposal from Uttar Pradesh and the market competition as required by a venture capitalist.	T-Test	T=-0.902 P=0.381	Accept Null Hypothesis
19	$H1_{do}$	There is no difference between the features of deal in proposals from Uttar Pradesh and the features of deal required by a venture capitalist.	T-Test	T= -1.19 P=0.091	Accept Null Hypothesis
20	$H1_{d1o}$	The percentage share of equity (ownership) offered to venture capitalist in proposals from Uttar Pradesh is as per the requirement of venture capitalist.	T-Test	T= -1.52 P=0.148	Accept Null Hypothesis
21	$H1_{d2o}$	The price of equity being offered to venture capitalist in proposals from Uttar Pradesh is as per the requirement of venture capitalist.	T-Test	T= 2.57 P=0.021	Reject Null Hypothesis
22	$H1_{d3o}$	The level of risk in proposals from Uttar Pradesh is as per the acceptance level of venture capitalist.	T-Test	T= -8.41 P=0.000	Reject Null Hypothesis
23	$H1_{d4o}$	The returns in proposals from Uttar Pradesh are as per the requirement of venture capitalist.	T-Test	T=-0.86 P=0.40	Accept Null Hypothesis
24	$H1_{d5o}$	The willingness of other venture capitalist to participate in proposals from Uttar Pradesh is as per the requirement of venture capitalist.	T-Test	T= 3.00 P=0.009	Reject Null Hypothesis
25	$H1_{d6o}$	The provisions in contracts in proposals from Uttar Pradesh are as per the requirement of venture capitalist.	T-Test	T= 1.13 P=0.27	Accept Null Hypothesis
26	$H1_{d7o}$	The ease of exit in proposals from Uttar Pradesh is as per the requirement of	T-Test	T= -2.611	Reject Null

		venture capitalist.		P=0.02	Hypothesis
27	$H1_{eo}$	There is no difference between the regional features of Uttar Pradesh and the regional features required by a venture capitalist.	T-Test	T=-12.10 P=0.000	Reject Null Hypothesis
28	$H1_{e1o}$	There is no difference in the distance from office of venture capitalist in Uttar Pradesh and the distance from office as required by a venture capitalist.	T-Test	T=-12.00 P=0.000	Reject Null Hypothesis
29	$H1_{e2o}$	The clarity of rules and regulations in Uttar Pradesh is as per the requirement of venture capitalists.	T-Test	T=-8.57 P=0.000	Reject Null Hypothesis
30	$H1_{e3o}$	The stability of policies in Uttar Pradesh is as per the requirement of venture capitalists.	T-Test	T=-4.44 P=0.001	Reject Null Hypothesis
31	$H1_{e4o}$	The infrastructure facilities in Uttar Pradesh are as per the requirement of venture capitalists.	T-Test	T=-4.37 P=0.001	Reject Null Hypothesis
32	$H1_{e5o}$	The availability of trained manpower in Uttar Pradesh is as per the requirement of venture capitalists.	T-Test	T=-6.35 P=0.001	Reject Null Hypothesis
33	$H1_{e6o}$	The law and order in Uttar Pradesh is as per the requirement of venture capitalists.	T-Test	T=-4.615 P=0.000	Reject Null Hypothesis
34	$H2_{ao}$	Venture capital funding will make no difference in promoting economic development in Uttar Pradesh.	T-Test	T=3.915 P=0.001	Reject Null Hypothesis
35	$H2_{bo}$	Venture capital funding will make no difference in making industrial unit in Uttar Pradesh more competitive.	T-Test	T= 4.216 P=0.009	Reject Null Hypothesis

36	$H3_o$	Government cannot promote venture capital funding in Uttar Pradesh.	T-Test	T= 3.533 P=0.03	Reject Null Hypothesis
37	$H4_o$	Syndication cannot promote venture capital funding in Uttar Pradesh.	T-Test	T= 2.69 P=0.017	Reject Null Hypothesis
38	$H5_{ao}$	Entrepreneurs in Uttar Pradesh do not face problems in raising equity capital.	T-Test	T=15.73 P=0.000	Reject Null Hypothesis
39	$H5_{bo}$	Entrepreneurs in Uttar Pradesh do not face problems in raising debt capital.	T-Test	T=19.38 P=0.000	Reject Null Hypothesis
40	$H5_{co}$	Entrepreneurs in Uttar Pradesh face no significant difference between problems in raising equity capital and problems in raising debt capital.	Chi-Square	P=0.779	Accept Null Hypothesis
41	$H5_{d1o}$	The problems faced in raising equity capital does not differ age- wise.	ANOVA	F=0.892 P=0.445	Accept Null Hypothesis
42	H_{d2o}	The problems faced in raising debt capital does not differ age- wise.	ANOVA	F=0.639 P=0.590	Accept Null Hypothesis
43	$H5_{e1o}$	The problems faced in raising equity capital does not differ location wise.	ANOVA	F=1.127 P=0.346	Accept Null Hypothesis
44	$H5_{e2o}$	The problems faced in raising debt capital does not differ location wise.	ANOVA	F=0.986 P=0.435	Accept Null Hypothesis
45	$H5_{f1o}$	Problems faced in raising equity capital does not differ gender wise.	ANOVA	F=0.423 P=0.516	Accept Null Hypothesis

46	$H5_{f2o}$	Problems faced in raising debt capital does not differ gender wise.	ANOVA	F=0.463 P=0.497	Accept Null Hypothesis
47	$H6_{ao}$	Entrepreneurs in Uttar Pradesh do not face problems in raising venture capital.	T-Test	P=0.000 T=5.46	Reject Null Hypothesis
48	$H6_{bo}$	For the entrepreneurs of Uttar Pradesh the problems faced in raising venture capital does not differ age-wise.	ANOVA	F= 0.423 P=0.516	Accept Null Hypothesis
49	$H6_{co}$	For the entrepreneurs of Uttar Pradesh the problems faced in raising venture capital does not differ location-wise.	ANOVA	F=1.384 P=0.221	Accept Null Hypothesis
50	$H6_{do}$	For the entrepreneurs of Uttar Pradesh the problems faced in raising venture capital does not differ gender-wise	ANOVA	F=1.639 P=0.201	Accept Null Hypothesis
51	$H7_{ao}$	Entrepreneurs in Uttar Pradesh do not expect non-financial assistance from venture capitalist	T-Test	P=0.001 T=3.33	Reject Null Hypothesis
52	$H7_{bo}$	For the entrepreneurs of Uttar Pradesh the assistance expected from venture capitalist does not differ age-wise.	ANOVA	F=2.655 P= 0.048	Reject Null Hypothesis
53	$H7_{co}$	For the entrepreneurs of Uttar Pradesh the assistance expected from venture capitalist does not differ location-wise.	ANOVA	F=0.609 P= 0.723	Accept Null Hypothesis
54	$H7_{do}$	For the entrepreneurs of Uttar Pradesh the assistance expected from venture capitalist does not differ gender-wise.	ANOVA	F=0.672 P= 0.413	Accept Null Hypothesis

Chapter 6

Conclusions and Recommendations

In the present chapter conclusions of the study are drawn and effort is made to make meaningful recommendation for the problems and prospects of venture capital in Uttar Pradesh. This chapter is divided into 4 sections, which are as follows:

6.1 Findings and conclusions

6.2 Recommendation

6.3 Limitation

6.4 Direction for future research

6.1 Findings and Conclusions

Based on the analysis of data from the two questionnaires one for the venture capitalist and entrepreneurs the following findings and conclusions have presented.

6.1.1 Evaluation criteria

Prior researches on venture capitalist investment criteria (Tyebjee & Bruno, 1984; MacMillan et al., 1985; 1987; Fried & Hisrich, 1994; Muzyka et al., 1996) identified a number of investment criteria. This research tried to find out the importance of the various evaluation criteria for venture capitalist in India and how far investments proposals from Uttar Pradesh are able to fulfill these evaluation criteria. The criteria used by venture capitalist in evaluating an investment proposal were classified under five different heads, which were as follows: characteristics of entrepreneurship, characteristics of target market, characteristics of products and services, features of deal and features of region. The findings for each of the above evaluation criteria along with the conclusions are as follows:

6.1.1.1 Characteristics of entrepreneurship

Venture capitalists were asked to rate the following features of entrepreneurs; Leadership Qualities, Integrity and Commitment, Commercial Orientation, Technical Expertise, Financial Expertise, Knowledge of Market and Ability to handle a Team.

All the above features of entrepreneurship have been rated as important by venture capitalist. For Uttar Pradesh, the presence of technical expertise of entrepreneurs was rated high while the long-term vision of its entrepreneur was rated low by the Venture capitalists.

The statistical tests show that apart from the long-term vision of entrepreneurs in Uttar Pradesh all the above features of entrepreneurs are as per the requirement of venture capitalist. From the test of the individual attributes of the characteristics of entrepreneurs in Uttar Pradesh we can conclude that entrepreneurs in Uttar Pradesh lack long-term vision but posses sound technical skills.

Also statistical test shows that the overall difference in the features of entrepreneurs as desired by venture capitalist and as present in investment proposals from Uttar Pradesh is not significance enough.

6.1.1.2 Characteristics of products and services

Venture capitalists were asked to rate the following features of products and services in the investment proposals from Uttar Pradesh: Uniqueness, Existence of prototype, Existence of patent and Superiority over the existing products. In the features of product and services the Uniqueness and Existence of prototype were rated as important by the venture capitalists. All the above features of products and services were rated as present in investment proposals from Uttar Pradesh by the venture capitalists.

Statistical tests of the individual features of product and services in proposals from Uttar Pradesh show that the uniqueness of product is not as per the expectations of venture capitalist but the overall difference between the features of product and services required

by venture capitalist and features of product and services present in proposals from Uttar Pradesh is not significance enough.

6.1.1.3 Characteristics of target market

Venture capitalists were asked to rate the following features of target market in the investment proposals from Uttar Pradesh: Market size, Market growth rate and Competition.

The above features of target market were rated as important by Venture capitalists. All the above features of the features of target market were rated as present in investment proposals from Uttar Pradesh.

Statistical test show that all the individual features of target market are as per the requirement of venture capitalist. Also on an overall basis, features of target market in proposals from Uttar Pradesh are per the requirement of venture capitalist.

6.1.1.4 Features of deal

Venture capitalist were asked to rate the following features of deals in the investment proposals from Uttar Pradesh: Percentage share of equity (ownership) offered to venture capitalist, Price of equity being offered to venture capitalist, Risk, Returns, Willingness of other venture capitalist to participate, Provisions in contracts to mitigate conflict with the entrepreneurs and Option of exit.

All the above features of deal except the price of equity offered were rated as important by venture capitalists. For investment proposals from Uttar Pradesh the willingness of other venture capitalist to participate is rated high while the presence of easy exit was rated low.

Statistical tests show that the all features of deal in investment proposal from Uttar Pradesh except the level of risk and the option of exit are as per the expectations of

venture capitalists. Statistical test also show that on an overall basis the deal is as per the requirement of venture capitalists.

6.1.1.5 Features of region

Venture Capitalists were asked to rate the following regional features of Uttar Pradesh: Distance from office of Venture capitalist, Clarity in the rules and regulations, Stability in policies, Infrastructure facilities, Availability of trained manpower and Law and order situation.

All the above features were rated as important by venture capitalist. For Uttar Pradesh the presences of regional features were rated low.

Statistical test were performed which showed that none of the above regional features are as per the expectations of venture capitalists. Also, statistical test show that the overall regional features are not as per the expectation of venture capitalist.

In view of the findings of the above criteria we can conclude that venture capitalists find investment proposals from Uttar Pradesh attractive enough in terms of the Characteristics of entrepreneurs, Characteristics of products and services, Characteristics of target market, Features of deal, but venture capitalists are not satisfied by the regional features of Uttar Pradesh.

6.1.2 Role of venture capital in development

Venture capital has played an important role in economic and industrial development in many countries. This study tries to find if venture capitalists can play a similar role in Uttar Pradesh. Venture capitalists were asked to rate how they can help in economic and industrial development of Uttar Pradesh.

6.1.2.1 Economic development

Venture capitalists were asked to rate the importance of the following role which can be played by them in economic development: Spurring innovation, Boosting

entrepreneurship, Helping in identify areas where Uttar Pradesh has competitive advantages, Generating employment, Attracting investments from other sources, improving brand image of Uttar Pradesh, Providing their expertise in policy formulation and Creating a trust amongst entrepreneurs to invest in Uttar Pradesh. The All the above were rated as important by venture capitalists. Statistical test on the above features of economic development show that venture capital can play a role in economic development.

On the basis of the responses from the venture capitalists it is concluded that venture capitalists can help in economic development of Uttar Pradesh

6.1.2.2 Industrial development

Venture capitalists were asked to rate the importance of the following role which can be played by them in the industrial development of Uttar Pradesh: Making industrial unit more competitive, Better evaluation of projects, Providing Strategic advice, Providing managerial advice, Expanding the marketing networks, Better management of financial resources, Instilling better governances and By helping in manpower recruitment and training. The All the above were rated as important by venture capitalists. Statistical test on the above features of industrial development show that venture capital can play a role in industrial development.

On the basis of the responses from the venture capitalists it is concluded that venture capitalists can help in industrial development of Uttar Pradesh.

6.1.3 Role of Government

In view of the role that governments in many parts of the world have played in promotion of venture capital, this study tries to find the role of government in promoting venture capital in Uttar Pradesh. Venture capitalists were asked the importance of the various steps which can be undertaken by the government to promote venture capital in state of Uttar Pradesh. Venture capitalist were asked to rate the following ways through which government can help in promoting venture capital in Uttar Pradesh: Improving

infrastructure, Helping venture capital funding through incubation organizations, Improving labor issues, Faster clearance of investment proposals, Simplification of Regulatory and legal issues, Through tax concessions, By establishing state dedicated venture capital funds, By establishing special cell to oversee venture capital, better clarification of the policies and procedures and Ensuring more stability in policies and procedures. All the above steps that can be taken by government were rated as important by venture capitalist. Statistical test on the above features show that government can promote venture capital in Uttar Pradesh.

On the basis of responses from the venture capitalist it is concluded that government can help in promotion of venture capital.

6.1.4 Effect of Syndication on venture capital funding

In spite of the stream of previous theoretical and empirical research on the reasons to syndicate venture capital investments, knowledge of the how syndication can promote venture capital firm is still thin. In this research, it is examined if syndication can also effect the investments of venture capital firms in the state of Uttar Pradesh. Venture capitalist were asked to rate the following advantages of syndication in the state of Uttar Pradesh; Better evaluation of venture, Sharing of risk and returns, Better management of venture and Giving a signal that the venture is good. All the above benefits of syndications were rated as important by venture capitalist. Statistical test on the above benefits of syndication show syndication will also help promote venture capital in Uttar Pradesh.

It is concluded that syndication can provide a number of benefits for venture capital firms

6.1.5. Problems faced in raising capital

Research on problems faced by entrepreneur in raising capital were first identified by the Macmillan report in 1931 and subsequently many researchers have shown that the two most common methods of raising funds are equity and debt and entrepreneur especially with new and innovative proposal face difficulty in raising funds and.

Problems faced in raising equity capital-

Entrepreneurs were asked to rate the following problems faced in raising equity capital; Insufficient funds, Lack of trust, High cost of funds, Time consuming process, Requirement of guarantee, Excessive paper work, Requirement of reference and Low chances of success in obtaining finance. The findings show that entrepreneurs face a number of problems in raising equity capital. Out of the above problems, entrepreneurs in Uttar Pradesh face maximum problems in convincing the providers of capital. Statistical test on the above features show that entrepreneurs face problems in raising equity capital due to the above features. Statistical tests also showed that the problem faced in raising equity capital does not differ age-wise, location-wise and gender-wise.

Based on the responses from the entrepreneurs it is concluded that entrepreneurs in Uttar Pradesh face problems in raising equity capital irrespective of their age, location and gender.

Problems faced in raising debt capital

Entrepreneurs were asked to rate the following problems faced in raising debt capital; Insufficient funds, Lack of trust, High cost of funds, Time consuming process, Requirement of collateral, Excessive paper work, Requirement of reference and Low chances of success in obtaining finance. Responses from the entrepreneurs show that they face a number of problems in raising debt capital. Out of the above problems, entrepreneurs in Uttar Pradesh face maximum problems in providing collateral/guarantee while raising debt capital. Statistical test on the above features show that entrepreneurs face problems in raising debt capital due to the above features. Also the problem faced in raising debt capital does not differ age-wise, location-wise and gender-wise.

Based on the response to the above features it is concluded that entrepreneurs in Uttar Pradesh face problems in raising debt capital and those entrepreneurs in Uttar Pradesh face no significant difference between problems in raising equity capital and problems raising in debt capital. It is also concluded that problems are faced in raising debt capital irrespective of the age, location and gender of the entrepreneur.

6.1.6. Problems of Venture Capital

Venture capital is generally considered as a synonym of high risk capital as it provides funds for new and starts up ventures. Due to the high risk and informational uncertainties associated with such ventures, venture capitalists demand ownership of business, control over the business decisions and more compensation. In view of the above features of venture capital financing, entrepreneurs face a number of problems in venture capitalists financing.

Many entrepreneurs were not even aware of the venture capital funding. Those entrepreneurs who were aware rated the following problems faced in venture capital funding. Venture capitalist; are unapproachable, are costly source of raising capital, interfere in business decisions, finance only high technology firms, ask for business plans, fund large business, take a long time in negotiations and are very selective in financing thus there is low chances of obtaining finance. The responses show that entrepreneurs face problems in all the above features. Out of the above, entrepreneurs in Uttar Pradesh face maximum problems in disclosing their business plans to venture capitalist. Statistical test on the above features show that entrepreneurs face problems in raising venture capital due to the above features. Also the problem faced in raising venture capital does not differ age-wise, location-wise and gender-wise.

Based on the responses from the entrepreneurs it is concluded that entrepreneurs in Uttar Pradesh face problems in raising venture capital irrespective of their age, location and gender.

6.1.7. Expectation from Venture Capitalist

Entrepreneurs rated the importance of the following types of assistance that can be provided by capitalists, venture capitalist can help in- strategic planning, marketing of products/services, providing technology, raising finance from other sources, operations, manpower recruitment and training and improving corporate governance. Responses from the entrepreneurs show that they expect assistance related to most of the above areas from venture capitalist. Out of the above feature the highest rating was for the financial

assistance that can be provided by a venture capitalist. On the other hand entrepreneurs rated the technical assistance, operational assistance and assistance in improving the corporate governance as low. Statistical test on the above features show that entrepreneurs give importance to the above assistance from venture capitalist. Also the assistance expected from venture capitalist differs age-wise but does not differ location-wise and gender-wise.

On the basis of which it is concluded that, entrepreneurs give more importance to the financial assistance that can be provided by venture capitalists. It is also concluded that irrespective of their location and gender entrepreneur expect assistance from venture capitalists.

6.1.8. Area and stages of venture capital investments in Uttar Pradesh.

Venture capitalists prefer to finance ventures related to certain specific sectors. In this study venture capitalist were asked in which sectors they would prefer to invest in Uttar Pradesh. The choices of sectors were as follows, Software, Hardware, Telecommunication, Biotechnology, Media/Entertainment and Real Estate. For venture capitalist Software, Hardware and Biotechnology were the top three areas of interest in the state of Uttar Pradesh.

There are a number of stages in venture capital financing. Venture capitalists were asked about their preferred stages for investment in Uttar Pradesh. The choice of stages were as follows Seed financing, Start up financing, Early stage/Growth financing, Development/expansion financing, Mezzanine financing and Management Buy in/ Buy out. For venture capitalist Early Stage/Growth, Development /Expansion and Start-up were the top three areas of interest in the state of Uttar Pradesh.

6.2 Recommendation

This research set out to study the problems and prospects of venture capitalists in the state of Uttar Pradesh. Based on the findings and conclusions the recommendations have been given with an aim to overcome the problems faced in venture capital and exploit the

potential of venture capital funding. The recommendations are classified under three heads: recommendations to government of Uttar Pradesh, recommendation to entrepreneurs and finally recommendation to venture capitalist.

6.2.1 Recommendations for government of Uttar Pradesh

An interesting finding highlighted by the study of Jeng & Wells (2000) is that government policies can have a dramatic impact on the current and long-term viability of the venture capital sector. The findings of this study also show that government can play a role in promotion of venture capital. In order increase the prospects of venture capital in the state; the following are the recommendations to the government of Uttar Pradesh

1. Provide better infrastructure- Infrastructure facilities were rated as low by the venture capitalist and should be improved.
2. Establish incubators- Apart from the three existing incubation organization at Kanpur, Lucknow and Noida government should set up more incubation centers.
3. Improve manpower availability - As investments of venture capitalist are in new and emerging areas they may face a shortage of manpower. Government should undertake policies to ensure the availability of manpower.
4. Faster clearance of investment proposals and more transparency and stability in the policies - In a competitive environment, good governance is an important pre-requisite for attracting investment. The government of Uttar Pradesh can provide good governance by clarifying the rules and regulations and by providing stability in policies related to investment in various industries. The government should implement mechanisms to enable faster clearance of investment proposals. These above steps if taken by the government will enable the venture capitalists to take a more informed and confident decision while investing in Uttar Pradesh.
5. Provide Tax concessions- In view of their role in promoting entrepreneurship, employment generation and contribution to the overall economic development of a region the government can provide monetary incentives in the form of cheap land and tax concession to investment proposals financed by venture capitalists.
6. Establish state dedicated venture capital funds – it was proposed in the industrial policy of UP-2004 that there should be a state sponsored venture capital fund

dedicated to financing investment proposals from Uttar Pradesh. Government should implement it and provide for a state dedicated venture capital fund in Uttar Pradesh. The state dedicated venture capital fund will focus only on the state of Uttar Pradesh. This will improve the prospects of venture capital financing in the state of Uttar Pradesh.

7. Establish special cell to oversee venture capital investment in Uttar Pradesh – Venture capital actively assists and monitors the business financed by them, the approach of venture capital is not limited to one time investing. A special cell can be formed to look into the bureaucratic and implemental problems faced by venture capitalist. Through such actions the government can convey that it is ready to provide help to venture capitalist. Venture capitalist will gain confidence and may be ready to fund more proposals from Uttar Pradesh.
8. Improve the regulatory and legal environment -The government of Uttar Pradesh should ensure a favorable law and order to prevent and resolve disputes.
9. Persuade venture capitalist to open offices in Uttar Pradesh - A survey of venture capitalists by Gorman & Sahlman (1989) found that lead venture capitalists visit their portfolio companies an average of 18.7 times per year. Most of the venture capitalists are located in Mumbai and Bangalore. As the distances of these locations are far from Uttar Pradesh, venture capitalists may avoid investments in Uttar Pradesh. The government can persuade the venture capitalists to open their branch/regional offices in Uttar Pradesh. If venture capitalist open their offices in Uttar Pradesh they may fund more investments from Uttar Pradesh and this can improve the prospects of venture capital financing in Uttar Pradesh
10. Exit options to small business- while evaluating investment proposals venture capitalists have highlighted that it is difficult to exit (liquidate) investments made in Uttar Pradesh. The government of Uttar Pradesh should try to workout how this problem can be taken care of.

6.2.2 Recommendations for Entrepreneurs of Uttar Pradesh

Venture capital has developed as an important intermediary in financial markets; they are providing capital to firms that might otherwise have difficulty-attracting financing.

Venture capital usually finances firms that firms are small and young plagued by high levels of uncertainty and have large differences between what entrepreneurs and investors know. Moreover, these firms typically possess few tangible assets and operate in markets that change very rapidly. Venture capital finances these high-risk, potentially high-reward projects. Venture capital does so by purchasing equity or equity-linked stakes while the firms are still privately held.

The problem is that many of the determinants of future value are unobservable to the venture capitalists. Entrepreneurs should therefore try to understand the viewpoint of venture capitalists and understand the cause of the problems in venture capitalists, this understanding help them in overcoming the problems they face in venture capital funding.

Given below are certain recommendations to the problems faced by entrepreneurs in raising venture capital funds.

1. Venture capitalists are unapproachable- As per this study and previous studies, venture capitalist use formal and informal mechanism to check the credibility of their investment. Venture capitalist thus adopts a referral system for identifying new investment opportunities. Entrepreneurs should try to approach venture capitalists through some references.
2. Venture capital is a costly source of raising capital –Venture capital financing differs from traditional methods of raising funds such as equity and debt. Venture capitalist demands a higher cost for funds as they undertake a substantially higher risk. Entrepreneurs should evaluate the cost of venture capital funding with due consideration of the risk undertaken by a venture capitalists and also acknowledge that Venture capitalist are not only providing the funds but they can also add value to the venture by their hand holding approach. To sum up venture capitalists not only provides funds but also monitors and advises an entrepreneur, in lieu of which venture capitalists demand a higher compensation. Thus, while evaluating the cost of venture capital, entrepreneurs must consider the additional benefits and risk borne by the venture capitalist. Studies on venture capital such as Hsu (2000)

have shown that entrepreneurs are ready to bear extra cost of venture capital in view of other than financing help provided by venture capitalist.

3. Lack of control on business decision as venture capitalist interferes in business decisions – A venture capitalists engages in information collection and monitoring once the project is under way. Venture capitalist interferes in business decision with an aim to make the venture successful. A successful venture will provide benefits to both the venture capitalists and entrepreneur. There are number of aspects related the financial, technical, marketing, manpower and operations and it is not necessary that entrepreneur may be able handle all these on their own. Thus entrepreneur should take the help of venture capitalists in business decisions, using their expertise so that the venture has better chances of being successful.
4. Confidentiality is lost, as business plans have to be to the disclosed venture capitalist -Venture capitalist do not ask for collateral but invest depending on the future potential, thus it becomes necessary for them to get a complete knowledge on the entrepreneurs venture by looking at the business plan. As detailed in the literature review there can be a conflict of interest between agent (entrepreneur) and a principal (Venture Capitalist). Theory has identified a number of ways that the investor/principal can mitigate these conflicts. One of them being that an investor can engage in information collection before deciding whether to invest, in order to screen out unprofitable projects and bad entrepreneurs. Keeping in mind the perspective of venture capitalist, entrepreneurs should discuss the business plans freely with venture capitalist in order to convince and gain advice and finance from the venture capitalists.
5. Funds requirement for new venture are too small for venture capital funding-Venture capitalist provide funding along with monitoring of proposals. For monitoring, venture capitalists have to spend managerial time and talent to oversee the proposals. Thus venture capitalists have made a certain threshold-funding limit, which makes it viable for them to finance and oversee the investments. If the fund requirement of entrepreneurs is lesser than the threshold-limit of venture capitalist, the entrepreneur can approach micro venture capital

funds such as Aavishkaar India micro venture capital fund. This fund provides micro-equity funding between Rs. 10 lacs to Rs. 2 Crores (approximately USD $20 thousand to USD $500 thousand) along with operational and strategic support to commercially viable companies.

6. Negotiations with venture capitalist are time consuming - As discussed in the literature review and results, evaluation of the proposal is done by a venture capitalist from a number of viewpoints. Before the closing of the investment and the design of the financial contracts, the venture capitalists spend a significant amount of time and effort evaluating and screening the investment opportunity. As this takes time entrepreneurs should appreciate the reasons for delay in financing.
7. Chances of obtaining finance from Venture Capital are low- Venture capital cannot finance all proposals, which they receive from the entrepreneurs. Historically only 1 in 100 of those firms that submit business plans to venture organizations have been funded (Fenn, Liang & Prowse, 1995). Venture capitalist provides funds to proposals, which are in their area of interest and meet their investment criteria. Entrepreneurs can increase their chances of receiving venture capital funds by the following:
    i. Venture capitalists have their preferences to fund proposals based on the stage of investment and areas of their interest. Entrepreneurs should approach the venture capitalists considering the area of interest of venture capitalists and the stage of their business. This will increase the chances of obtaining finance from venture capitalists.
    ii. The findings of this study have identified the importance of the various features from the perspective of venture capitalist. Entrepreneurs should ensure that their proposal fulfills the investment criteria of venture capitalist.

Entrepreneurs should realize that convincing any external resource providers to provide financial capital might be challenging particularly for entrepreneurs without an

established reputation. As for any investment to be realized, the investor needs to somehow assess and validate the viability of a venture. In other words, he has to somehow find out the current and future value of the venture that is built on of technology, knowledge, entrepreneurial team, business model and so on. The ultimate goal for the investor is to be able to make a distinction between the low-productive and high-productive ventures, out of the total deal flow he confronts.

6.2.3 Recommendations for venture capitalist

In order to improve the prospects of venture capital in Uttar Pradesh the following are recommended to the venture capitalist:

1) **Venture capital should syndicate investments-** As per the literature review, subsequent findings and conclusion of this study; syndication provides a number of benefits to venture capital investments. For example
   i. Better evaluation of venture- Evaluation of an investment proposal by more than one venture capitalist may lead to better evaluation, as it would be more thoroughly evaluated. Better evaluation will increase the probability to select better proposals for funding.
   ii. Sharing of risk - If more than one venture capitalist is participating in a venture, the risk can be jointly shared. As per the findings of this study, venture capitalists perceive investment proposals from Uttar Pradesh as being risky. By syndication venture capitalist can reduce the risk and therefore more investment proposals from Uttar Pradesh can be financed.
   iii. Better management of venture- The potential value-adding activities of a venture capitalist include, for example, monitoring financial and operational performance, recruitment of management, arranging financing from complementary sources, serving as a sounding board to the entrepreneurial team, arranging incentive plans, providing access to auditors, lawyers and investment banks, and setting company policies. Participation of more than one venture capitalist may provide more expertise, which can further improve the capabilities to add value to a venture.

iv. Provides signals that the venture is good- Signaling refers to activities, by which the effects of informational asymmetries can be reduced. Investment a by syndicate of venture capitalists may convey that as the proposal has been apprised and passed by more than one venture capitalists the quality of proposal is good.

As syndication is beneficial for of venture capital investments it can be used for funding investment proposal from Uttar Pradesh.

2) Open offices in Uttar Pradesh- As of now venture capitalists are concentrated in Mumbai and Bangalore, which are far from Uttar Pradesh. In fact not only Uttar Pradesh but also the entire eastern part of India does not have any venture capitalists. If venture capitalists consider opening offices in Uttar Pradesh it may help them in not only financing and monitoring projects in Uttar Pradesh but aid in their operation throughout eastern India.
3) Educate entrepreneurs on the concept of venture capital and problems faced - For most entrepreneurs; venture capital remains an untried finance. As per this study many entrepreneurs are not even aware of venture capital funding. Mostly entrepreneurs are used to the traditional sources of funding such as equity and debt, so they need to be familiarized with venture capital. This will help entrepreneurs to appreciate the nuances of venture capital and may lead to more understanding with the venture capitalists. This will build trust and more proposals from Uttar Pradesh would be financed.
4) Reduce their minimum funding size per deal – The average size of venture capital investment in the year 2006 was $7mn Rs 35 crores (IVCA, 2006). This is beyond the requirement of most entrepreneurs. To in order to entertain more proposals from Uttar Pradesh venture capitalist should decrease their funding size. By doing so more proposals from Uttar Pradesh could be financed.
5) Fund more investment proposals - As per findings of our study for venture capitalist Software, Hardware and Biotechnology were the top three areas of interest in the state of Uttar Pradesh. There can be opportunities to finance investment proposals related to the above areas as Uttar Pradesh has number of

reputed scientific and industrial research institutes such as which are carrying out research in areas such as information technology, biotechnology, pharmaceuticals and drugs, agriculture and food processing. These areas have been identified as having a high potential of fostering future growth. The prospects of venture capital to finance scientific and knowledge-based ideas have been highlighted in a number of studies (Chandrasekhar Committee, 2000). Venture capitalist can finance new innovations from the research institutes of Uttar Pradesh and aid in the economic development of Uttar Pradesh.

6.3 Limitations of the study

This study on the problems and prospects of Venture Capital in Uttar Pradesh has a number of limitations, which can be stated as follows:

1) This study is based on the perception of venture capitalist and entrepreneurs. Empirical findings related to the problems and prospects of venture capital might differ from the perception.
2) As no previous studies exist for Uttar Pradesh, this study uses the criteria and issues highlighted in previous studies conducted for different parts of the world. It may be noted that studies have pointed out that evaluation criteria and issues in venture capital are region specific, they vary from place to place. This implies that criteria and issues studied are general and not specific to the state of Uttar Pradesh.
3) This study relies on information reported by venture capitalist. Several scholars (Sandberg et al., 1986; Hall, 1989;Hall, H. J. & Hofer, C. W., 1993) have criticized studies based on venture capitalists' self reports. They have stated that venture capitalist understate the important criteria and overstate the less important criteria. As per this limitation the responses from Venture Capitalist cannot be considered as accurate.
4) Another limitation of this thesis is that venture capitalist are not rational decision makers (Sahlman & Stevenson, 1985) they may suffer from preconceived notions, which may have affected their responses in this study.

5) Perception of venture capitalist pertaining to the economic growth might differ from the empirical findings. But even with empirical research assessing the economic impact of venture capital becomes quite difficult, because in terms of capital investment it is only a minute portion of the total economy. It is possible that the firms the venture capitalists backed would have come into existence even without venture capital funding, as the entrepreneurs might have funded the firm from other sources (Kenney, et.al, 2002).

6) Venture capitalists have stated how Uttar Pradesh government can promote venture funding in the state of Uttar Pradesh. But the state government cannot undertake all such decision without the support of central government.

7) Venture Capital as a source of finance for entrepreneurs is yet to gain popularity in Uttar Pradesh. Entrepreneurs would be able to appreciate the nuances of venture capital and provide more accurate information only after they get more accustomed to such type of funding. Also as venture capital in Uttar Pradesh is in nascent stage, it will take some time before venture capitalist get more familiar with Uttar Pradesh and take more informed decisions.

8) Venture capital funding adopts a hand –holding approach, as venture capital apart from providing funds also assists entrepreneurs in numerous ways. Once venture capital funding takes-off in Uttar Pradesh the issues involved in the actual financing and implementation of venture capital will become clearer.

9) Prospects of venture capital are not only influenced by the local conditions of a particular region (state), they to a large extent depend on the general market for new product and securities. Numerous studies have shown that the general equity market conditions have an impact on venture capital financing. Jeng & Wells (2000) studied venture capital fund raising in twenty-one countries and found that the strength of the IPO market to be an important factor in deciding venture capital commitments. Thus prospects of venture capital in Uttar Pradesh would also depend on the general investment climate prevailing in India and the World over.

10) This study uses survey method to collect data from a sample. Survey method has the following limitations:
    i) The time and cost factor restricts the size of sample. A small sample may not represent the population correctly.
    ii) Bias may occur if the sample selected for study is not really representative of the population.

6.4 Directions for Future research

The present research tries to find the problems and prospects of Venture Capital in the state of Uttar Pradesh. The following are some of the further studies that can be carried out on venture capital.

1) Venture Capital is a new concept for Uttar Pradesh so the problems and prospects of venture capital will evolve and change over a period of time. Thus further studies can be undertaken to gain deeper insights. Once Venture Capital funding becomes more popular in Uttar Pradesh, a much clear picture on the problems and prospects will emerge, which can be studied in future researches.
2) This study finds the problems and prospects for Venture Capital in Uttar Pradesh, without focusing on one particular sector or industry. Further studies can be conducted having a sector specific focus, which may provide deeper insights.
3) This study finds the prospects of Venture Capital in general irrespective of the funding stage. Further studies can be conducted stage-wise for venture capital Funding.
4) Many other issues related to venture capital, which have been discussed in literature review chapter 3, can be studied in future research. For example further studies can be carried out on the following issues in venture capital funding, staging investments, asymmetric information, signaling, agency cost, contracting, valuation, returns, risk, controlling and corporate governance.
5) This study is based on the perspectives of venture capitalist and entrepreneurs as related to the problems and prospects of venture capital in the state of Uttar Pradesh. Empirical research can be carried out to gain further insights into the research topic.

6) Problems and prospects of venture capital can be studied for other states as well. After which a comparison can also be done between Uttar Pradesh and the other states. This will give an insight into the variations (if any), region-wise in the importance of the evaluation criteria and issues in venture capital financing.
7) Studies can be conducted on the data obtained from the companies funded by venture capital in Uttar Pradesh. For such many issues such as corporate governance, IPO pricing, employment generation, growth rate can be studied. Also a comparison between venture capital backed companies and non-venture capital backed companies can be done in terms of the above-mentioned issues.

REFERENCES

Aaker, D.A. & Day, G.S. (1986) The perils of high growth markets. Strategic Management Journal, 7: 409-421.

Abbott, S. & Hay, M. (1995) Investing for future: New firm funding in Germany, Japan, UK and the USA. London: Pitman.

Abeer E.H. & Leece, D. (2004) How venture capital firms value unquoted companies. NBER, WP 1121.

Admati, A.R., & Pfleider, P. (1994) Robust financial contracting and the role of venture capitalist. Journal of Finance 49:371-402.

Aghion, P. & Bolton, P. (1992) An approach to financial contracting. Review of Economic Studies, 59, 473-494.

Ajai & Sanjaya Gaur. (2006) Statistical methods for practice and research. India: SAGE.

Akerlof, G. (1970) The market for lemons: quality uncertainty and the market mechanism. Quarterly Journal of Economics 84(3): 488 – 500

Allen, D.N. & Hayward, D.J. (1990) The role of new venture formation/entrepreneurship in regional economic development: A review. Economic Development Quarterly 4(1): 55-63.

Alvin Burns & Ronald Bush. (2007) Marketing research, 5 Ed. New Delhi: Pearson.

Amit, R., Brer, J., & Zott, C. (1998) Why do venture capital firms exist? Theory and practice from Canadian evidence. Journal of Business Venturing, 13: 441–466.

Armstrong J. S, & Overton T. (1977) Estimating non-response bias in mail surveys. Journal of Marketing Research 14:396-402.

Anderson. (1982) Small industry in developing countries: a discussion of issues, World Bank.

Asian Venture Capital Journal, (AVCJ) 2001. The 2001 guide to venture capital in Asia.

Bachher, J. S. (2000) Venture capitalists' investment criteria in technology-based new ventures. Unpublished doctoral dissertation, University of Waterloo.

Barriera, JCD. (2004) The influence of business knowledge and work experience, as antecedents to entrepreneurial success. Unpublished doctoral thesis.

Barkley, D .L, & Markley, D.M. (2001) Nontraditional sources of Venture Capital in Rural America. Rural America.

.

Barry, C.B., Muscarella, C.J., Peavy, J.W. & Vetsuypens, M.R. (1990) The role of venture capital in the creation of public companies. Journal of Financial Economics, 27(2), 447 – 471.

Bean, Alden. (2000) Invisible People: Race, Gender, the SBA in the 1950s. Unpublished manuscript chapter.

Belke, A.R. Fehn, & N. Foster. (2003) Does venture capital investment spur employment growth? CESIFO Working Paper No. 930.

Benoit, J. L. (1975) Venture capital investment behavior: The risk capital investor in new company formation expansion in France, Unpublished doctoral dissertation, University of Texas.

Berger, A.N. & Udell G..F. (1998) The economics of small business finance: the roles of private equity and debt markets in the financial growth cycle. Journal of Banking Finance 22: 613-673.

Birch, D.L. (1979) The job generation process. Final report to economic development, Cambridge, MA: MIT Program on Neighborhood Regional Change.

Black, B.S & Gilson. R..J. (1998) Venture capital and the structure of capital market: Banks versus stock market. Journal of Financial Economics 47:243-77.

EU's Lisbon Agenda. (2006) Boosting innovation, productivity and growth in Europe: The hope and the realities. Center for economic performance.

Booth, J. & Chua, L. (1995) Structure and pricing of large bank loans. Economic Review, Federal Reserve Bank of San Francisco, 3, 52-62.

Booth, J. R., & Smith R. (1986) Capital raising, underwriting and the certification process. Journal of Financial Economics 15, 261–281.

Bottazzi, L., Marco Da Rin, & Thomas H. (2004) Active financial intermediation: evidence on the role of organizational specialization and human capital. RICAFE WP No.12.

Bottazzi, L., & Marco Da Rin. (2002) Venture capital in Europe: Financing of European innovative firms. Economic Policy, 17 (1), 229—69.

Bovaird, C. (1990) Introduction to venture capital finance. London: Pitman.

Bowonder & Sunil Mani. (2002) Venture capital innovation: The Indian experience. UNU/INTECH EU-DG Research, Brussels.

BVCA & Bannock. (2003) The economic impact of venture capital trusts in the United Kingdom.

Bygrave, W.D. (1987) Syndicated investments by venture capital firms: A networking perspective. Journal of Business Venturing 2(2): 139 – 154.

Bygrave, W.D. (1988) The structure of the investment networks of venture capital firms. Journal of Business venturing 3: 137 – 158.

Bygrave, W. D & Timmons, J. (1991) Venture and risk capital: Practice and performance. Harvard Business School Press.

Bygrave, W. D. & Timmons, J. (1985) An empirical model for the flows of venture capital. Frontiers of Entrepreneurship Research.

Carlsson, B. & Karlsson, C. (1999) The Linkages among Entrepreneurship, Small and Medium-Sized Enterprises and the Macroeconomics. Cambridge, U.K.: Cambridge University Press.

Carmines, E.G. & Zeller, R.A. (1979) Reliability and validity assessment. Beverly Hills: SAGE Publications:

Chitale, V. P. (1983) Risk capital for industry. New Delhi: Allied Publishers.

Churchill, G. A. (1999) Marketing Research - Methodological foundations, Seventh Edition. Fort Worth: The Dryden Press.

Churchill, G. A. (1979) A paradigm for developing better measures of marketing Constructs. Journal of Marketing Research, 26, 64-73.

Clarke, Marianne K. (1987) State-supported SBIR programs and related state technology programs. Washington, National Governors' Association.

Cook T.D. & Campbell, D.T. (1979) Quasi-experimentation: design analysis for field settings. Chicago, Illinois: R McNally.

Carvalho, A. G., Charles, W. C., & Joan A. (2005) Venture capital as human resource management. NBER, Working Paper 11350.

Cardullo, M. (1999) Technological entrepreneurship: Enterprise formation, financing and growth. Research Studies Press Ltd., United Kingdom.

Casamatta, C. (1999) Financing advising: optimal financial contracts with venture capitalists. University de Tolouse, Mimeo.

Chrashekhar, K.B. (2000) Chrasekhar committee on venture capital, India.

Clark, Gordon L. & Connor, K. (1997) The informational content of financial products: the spatial structure of the global finance industry. In K. R. Cox (Ed.).

Cochrane, J.H. (2005). The risk and return of Venture Capital. Journal of Financial Economics, 75, 3–52.

Cooke, D.J. (1996). Venture Capital: Law and Practice. UK London: Pearson Professional Ltd.

Cooper, D.R & Scindler, D.S. (2001). Business Research Methods 7th Edition. McGraw Hill.

Cornelli, F. & Yosha, O. (2001). Stage financing and the role of convertible securities. Working Paper No. 253-1997, London Business School.

Coval, J., & Moskowitz, T. (2001). The geography of investment: Information trading and asset prices. Journal of Political Economy, Vol. 109, 811—841.

Cull R, L Davis, N Lamoreaux & J-L Rosenthal. (2005) Historical financing of small-medium sized enterprises. NBER, Working Paper 11695.

Cumming, D.J., MacIntosh, J.G. (2002). Venture Capital exits in Canada and the United States. University of Toronto Law Journal 53:101-200.

David W. Hughes, Kris Mallory & Michaela A. Szabo. (2004) Factors influencing venture capital availability in rural states: possible lessons learned from West Virginia. North American Regional Science Association.

Deloitte (2006) Venture Capital goes global.

Dillman, D. A. (2000) Mail and Internet surveys: The tailored design method. Second Edition. New York: John Wiley & Sons.

Dillman, D. A. (1978) Mail telephone surveys: The total design method. New York: John Wiley & Sons.

Dossani, R. (2006) Accessing early stage risk capital in India, APARC, Stanford, USA.

Dossani, R. & Kenney M. (2002) Creating an environment for venture capital in India, World Development, Vol. 30, No. 2 Pp 227-253.

Douglas, C. & Na Dai. (2007) Local bias in venture capital investments, presented at the Financial Management Association.

Duffner, S. (2003) Principal agent problems in venture capital funding, WWZ/ Department of finance/WP11/03.

Eid, F. (2005) Entrepreneurial finance for job creation in the Arab world: elements of a strategy. MENA-OECD Programme Stocktaking Report, OECD, Paris.

Ernst & Young, (2006). Global private equity: Venture capital insights report 2005-2006.

European Commission (2003) Communication on the implementation of the risk capital action plan, Brussels.

European Commission (2002) More research for Europe: Towards 3% of GDP, Brussels.

European Commission (1995) Green paper on innovation.

European Commission (1994) European report on science technology indicators, EUR 15897, Brussels.

European Commission (1998) Risk Capital: A key to job creation in the European Union, Brussels.

European Investment Fund, Annual Report 2001.

European Venture Capital Association, (2006). Annual survey of pan European private equity venture capital activity, Brussels.

European Union (2005) Access to finance for SMEs of the Middle East North Africa Region, Experts Group Report.

European Venture Capital Association, (2003). Benchmarking European tax and legal environments, Benchmarking Paper, Brussels.

European Venture Capital Association, 2001 Yearbook.

European Venture Capital Association, 1996-2006. Yearbook.

Frederickson. (2000) The entrepreneurs' venture capitalist relations: frontiers of entrepreneurial research center for entrepreneurial studies, Massachusetts.

Feldman, M. P. (2001) The entrepreneurial event revised: firm formation in a regional context. Industrial Corporate Change 10(4): 861-891.

Fenn, George W., Nellie Liang, & Stephen Prowse. (1995) The economics of the private equity market. Washington, Board of Governors of the Federal Reserve System.

Fichera, D. (2001). The insider's guide to Venture Capital. California, USA: Prima Publishing.

Fluck, Z., (1998) Optimal financial contracting: Debt versus Outside Equity. Review of Financial Studies, 11, 383-418.

Freear, J., &. Wetzel, W.E. (1990), Who bankrolls high-tech entrepreneurs? Journal of Business Venturing 5, 77-89.

Fried, V. H. & Hisrich, R. D. (1994) Toward a model of venture capital investment decision making. Financial Management, 23: 28 – 37.

Fluck, Zsuzsanna, Kedran Garrison, Stewart Myers. (2005) Venture capital contracting and syndication: An experiment in computational corporate finance, NBER Working Paper No. W11624.

Gaedeke RM. & Tootelian, RD. (1976). The Fortune 500 list-An endangered species for academic research, Journal of Business Research 4:283-288.

Gill, D. (1980) Venture capital in selected countries, IFC. Washington, DC.

Golder, P.N. & Tellis, G.J. (1993) Pioneer advantage: Marketing logic or marketing legend. Journal of Marketing Research, 30(2): 158-170.

Goldsmith, R. (1969) Financial structure and development. New Haven: Yale University Press.

Gompers, P. & Lerner, J. (2006) The venture capital cycle. New Delhi: Pearson Education.

Gompers, P. & Lerner, J. (1998) The determinants of corporate venture capital successes, organizational structure, incentives and complementarities. NBER, Working Paper No. W6725.

Gompers, P. & Lerner J. (1996). The use of covenants: An empirical analysis of venture partnership agreements, Journal of Law Economics 39, 463-498. 1998.

Gompers, P. (1996) Grandstanding in the venture capital industry. Journal of Financial Economics, 42(1): 133 – 156.

Gompers, P. (1995a). Optimal investments, monitoring and the staging of venture capital. Journal of Finance, Vol. 50, 1461—1489.

Gompers, P. (1995b) The rise and fall of venture capital. Business Economic History, 23, 1-26

Gorman, M. & Sahlman, W. A. (1989) What do venture capitalists do? Journal of Business Venturing, 4(4): 231-248.

Hall, Bronwyn, H. (1992) Investment Research Development: Does the Source of Financing Matter. Working Paper No.92-194, Department of Economics, University of California at Berkeley.

Hall, R. & Susan W. (2007) The incentives to start new companies: Evidence from venture capital. NBER WP 13056.

Hall, H. J. & Hofer, C. W. (1993). Venture capitalists' decision criteria for new venture evaluation. Journal of Business Venturing, 8: 25 – 42.

Hall, H. J. (1989) Venture capital decision-making and the entrepreneur: An exploratory investigation unpublished doctoral thesis. University of Athens, Georgia.

Hallward M. & Stewart, D. (2005) How do investment climate conditions vary across countries? World Development Report 2005.

Hao, K.Y. & Jaffe, A. (1993) Effect of liquidity on firms' R&D spending. Economics of innovation, New Technoio, 2,275-282.

Hellman, T. & Puri, M. (2002a) The interaction between product market and financing strategy: the role of venture capital. Review of Financial Studies, 13 (4): 959 – 984.

Hellman, T. & Puri, M. (2002b) Venture capital professionalization of start-up firms: Empirical evidence. Journal of Finance, 57(1): 169–197.

Hellmann, T. (1998) The allocation of control rights in venture capital contracts. Rand Journal of Economics 29:57-76.

Hill, B.E. & Power, D. (2001) Inside secrets to venture capital. New York, USA: John Wiley & Sons, Inc.

Himmelberg, C.P. & Petersen, B.C. (1994) R&D and internal finance: A panel study of small firms in high-tech industries. Review of Economics Statistics, 76(1), 38-51.

Hisrich, R. D. & Jankowicz, A. D. (1990) Intuition in venture capital decisions: An exploratory study using a new technique. Journal of Business Venturing, (5): 49-62.

Hochberg, Y., Ljungqvist, A. & Lu,Y. (2006) Network As a Barrier to Entry and the Competitive Supply of Venture Capital. Working Paper, Northwestern University and New York University.

Hochberg, Y. (2004) Venture capital and corporate governance in the newly public firm. Unpublished working paper. Stanford University.

Hoffman, C.A. (1972) The venture capital investment process. Unpublished doctoral dissertation, The University of Texas at Austin.

Hofstede, G. (1984) Culture's consequences: international differences in work-related values. Beverly Hills, CA: Sage Publications.

Hsu, D.(2002) what do entrepreneurs pay for venture capitalist affiliation? Unpublished working paper. University of Pennsylvania.

Hunt, S. D., Sparkman, R. D. & Wilcox, J. B. (1982) The pretest in survey research: issues and preliminary findings. Journal of Marketing Research, 14, 269-273.

Huntsman B, Hoban J.P. (1980) Investments in new enterprise: Some empirical observations on risk return and market structure. Financial Management 9: 44 – 51.

Iftekhar H., Wang, H. (2007) The role of venture capital in innovation, new business formation and economic growth. Berkley Center for Entrepreneurial Studies.

Jeng, L.A. & Wells, P.C. (2000) The determinants of venture capital funding: evidence across countries. Journal of Corporate Finance 6(3): 241-289.
Jensen, M.C., and Meckling, W.H. (1976) Theory of the Firm: Managerial Behavior, Agency Costs, and Capital Structure. Journal of Financial Economics, October 1976, 3(4), pp. 305-60.

John, Reeve. (1982) Reliability and validity of key informants data from dyadic relationships in marketing channels. Journal of Marketing Research 19:517-524.

Kaplan, S., Steven & Antoinette Schoar. (2005) Private equity performance: returns, persistence and capital flows. Journal of Finance 60, no. 4 (2005): 1791-1823.

Kaplan, S., & Stromberg, P. (2004) Characteristics, contracts, actions: evidence from venture capitalist analysis. Journal of Finance, Vol. 59, 2177—2210.

Kaplan, S. & Stromberg, P. (2003) Financial contracting meets the real world: An empirical analysis of venture capital contracts. Review of Economic Studies 70, 281-316.

Kaplan, S. & Stromberg, P. (2001). How do Venture capitalists choose investments? University of Chicago Graduate School of Business, Working Paper.

Kenney, M., Han, K. & Tanaka, S. (2001). Scattered the geese: Venture capital in East Asian nations. Report to the World Bank.

Kenney, M. & Von B. (2000a) Institutions and economies: Creating silicon valley.In M.Kenney (Ed.). Understanding Silicon Valley: Anatomy of an entrepreneurial region (Stanford).

Kenney, M. (2000b) Venture Capital. NBER.Working Paper 142.

Kenney, M. & Von B. (1999) Technology path dependence: the divergence between Silicon Valley routes. Industrial Corporate Change (1): 67–103.

King, Robert G. & Ross Levine. (1993) Finance growth: Schumpeter might be right, Quarterly Journal of Economics 108, 717-737.

Kirchhoff, B. A. (1994) Entrepreneurship dynamic capitalism: the economics of business firm formation and growth.

Kirilenko A. (2001) Valuations and control in venture finance. Journal of Finance 56 (2): 565 – 587.

Khan, A.M. (1987). Assessing venture capital investments with non-compensatory behavioral decision Models. Journal of Business Venturing, (2): 193 – 205.

Khanin, D. M. (2006) Venture capitalists' investment and reinvestment decisions. Unpublished doctoral dissertation, University of Maryland.

Knight, R. M. (1994) Criteria used by venture capitalists: A cross-cultural analysis. International Small Business Journal, (13): 26 – 37.1994).

Knight, R. M. (1992) A longitudinal study of criteria used by venture capitalists in Canada. Journal of Business Venturing (4): 12-26.

Koh, F. C & Koh, W .T. H. (2002) Venture capital and economic growth: An industry overview of Singapore's experience. Singapore Economic Review 47(2): 243-267.

Kortum, S. & Lerners, J. (2007) Does venture capital spur innovation. NBER, WP 6846.

KPMG-TiE, (2007) Entrepreneurial India: An assessment of the Indian entrepreneur's confidence in their business ecosystem.

Kumar, A. V. & Kaura, M. N. (2003) Venture capitalists screening criteria. The Journal for Decision Makers, 28(2), 49- 59.

Leland, H.E. & Pyle, D.H. (1977) Information asymmetries, financial structure and financial intermediation. Journal of Finance, 32: 371-387.

Lerner, J. (1999) The Government as venture capitalist: The long-run effects of the SBIR program. Journal of Business 72: 285-318.

Lerner, J. (1995) Venture capitalists and the oversight of privately held firms. Journal of Finance, 50: 301-318.

Lerner, J. (1994) The syndication of venture capital investments. Financial Management, 23(3): 16 – 27.

Lim, H. (1998) Korea's growth and industrial transformation. Macmillan Press.

Lindsey, L. (2003) The Venture capital keiretsu effect: An empirical analysis of strategic alliances among portfolio firms, NBER Working Paper No. 8123.

Little, I.M.D.(1987)Small manufacturing enterprises in developing countries, The World Bank, Economic Review,1,203-35.

Litwin, M.S. (1995) How to measure survey reliability and validity CA: SAGE, Publications.

Ljungqvist, A. & Matthew R. (2003) The cash flow, return and risk characteristics of private equity. NBER Working Paper No. 9454.

Lockett A. & Wright, M. (2001) The syndication of venture capital investments. Omega 29: 375 – 390.

Lorenz, A. (1989) Venture capital today: A practical guide to the venture capital market. 2nd ed. London: Woodhead-Faulkner.
Macmillan Committee (1931) Report of the committee on finance and industry. London, HMSO.

MacMillan, I. C., Siegel, R. & Subba Narasimha, P. N. (1985) Criteria used by venture capitalists to evaluate new venture proposals. Journal of Business Venturing, (1): 119 – 128.

Manigart, S., Wright, K., Robbie, P., & Waele, K.D. (1997) Venture capitalists' appraisal of investment projects: an empirical European study. Entrepreneurship Theory & Practice, Vol. (21), No. (4), pp. 29-43.

Mark, S., Philips, L. & Adrian, T. (2006) Research Methods for Business Students, 3 Ed.New Delhi: Pearson.

Mckinnon, R., (1973) Money capital in economic development. Washington DC, Brookings Institution.

Megginson, W.L & Weiss, K.A. (1991) Venture capitalist certification in initial public offerings. Journal of Finance 46(3): 879 – 903.

Meyer, L.H. (1998) The present and future roles of banks in small business finance. Journal of Banking Finance 22: 1109-1116.

Mishra, A. & Asim, K. (1996) Venture capital financing in India, New Delhi, Shipra Publications.

Moles, P. & Terry, N. (1999) The Handbook of international financial terms. UK: Oxford University Press.

Muzyka, D., Birley, S. & Leleux, B. (1996) Trade-offs in the investment decisions of European venture capitalists. Journal of Business Venturing, (11): 273 – 287.
Myers, S. C. (2000) Outside Equity. Journal of Finance, 55, 1005-1038.

Neher, D. (1999) Staged financing: an agency perspective. Review of Economic Studies 66,255–274.

Noone, C. M. & Rubel, M. (1970) SBICS: Pioneers in organized venture capital. Chicago: Capital Publishing Company.

Nunnally J.C. (1978) Psychometric Theory, second edition, Mcgraw-Hill, New York.

OECD (2006) SME Growth–OECD Keynote Report.

OECD, (2001) Drivers of growth, Paris.

OECD, (2000) The changing role of innovation in growth. Paris.

Pandey, I.M. (2002) Venture capital and entrepreneurial development: The Indian experience, Working Paper No.1032. IIM, Ahemdabad.

Pandey, I.M. (1995) Venture capital the Indian experience, PHI.

Pence, C.C. (1982) How venture capitalist make investment decisions. Ann Arbour: UMI Research Press.

Penrose, E. (1959) The Theory of the growth of the firm. NY: Oxford University Press.

Podolny, J.M. (2001) Networks as pipes prisms of the market. American Journal of Sociology 107(1): 33 – 60.

Podolny, J.M. (1994) Market uncertainty and the social character of economic exchange. Administrative Science Quarterly 39: 458.
Poindexter, E. A. (1976) The efficiency of financial markets: The venture capital case. Unpublished doctoral dissertation, New York University, New York.

Poterba, J. (1989) Venture capital and gains taxation. Tax Policy and the Economy. Cambridge: MIT Press.

R. Premus . (1985) Venture capital and innovation. USGPO, Washington. D. C.

Rah, J., Jung, K., & Lee, J. (1994) Validation of the venture evaluation model in Korea. Journal of Business Venturing 9: 509 – 524.

Rajan, R. & Zingales, L. (2001). Financial systems, industrial structure and growth. Review of Economic Policy, 17: 467-482.

Rajan, R. & Zingales, L. (1998) Financial dependence and growth. American Economic Review, 88, 559-86.

Ramesh, S. & Gupta, A. (1995) Venture Capital and the Indian Financial Sector. Delhi: Oxford University Press

Rangarajan,C. (1980) Innovations in Banking, Domestic Financial Study 63, World Bank.

Reiner, M. L. (1989) The transformation of venture capital: A history of venture capital organization in the United States. University of California, Berkeley.

Report of the committee on technology innovation and venture capital. Government of India, Planning Commission New Delhi, July 2006.

Richard & Martin Kenney. (1988) Venture capital-financed innovation and technological change in the US. Research Policy 17 (3): 119-37.
Riquelme, H. & Rickards, T. (1992) Hybrid conjoint analysis: An estimation probe in the new venture decisions. Journal of Business Venturing, 7: 505 – 518.

Ritter, J.R. (1998). Initial public offerings. In Warren, Gorman, Lamont handbook of modern finance, edited by D.Logue J.Seward.Boston:WGL/RIA

Robinson, R. R. (1987) Emerging strategies in the venture capital industry. Journal of Business Venturing, 2: 53-77.

Rosen, H.S. (1998) The Future of entrepreneurial finance. Journal of Banking and Finance 22:1105-1107.

Rosenstein, J., Albert V., Bygrave W. & Natalie T. (1993) The CEO, venture capitalists and the board. Journal of Business Venturing 8: 99 113.

Ross, S. A., Westerfield, R. W. & Jaffe, J. (1993) Corporate Finance. New York: McGraw-Hill.

Ruhnka, J.C., Feldman, H.D., & Dean, T.J. (1992) The "living dead" phenomenon in venture capital investments. Journal of Business Venturing, 7: 137–155.

Ruhnka, J.C. & Young, J.E. (1991) Some hypotheses about risk in venture capital investing. Journal of Business Venturing 6(2): 115 – 133.

Ruhnka, J. C. & Young, J. E. (1987) A venture capital model of the development process for new ventures. Journal of Business Venturing, 2:167–184.

Sagar, S.B. & Guidotti, S. (1991) Venture capital operations and their roles in less developed markets, World bank, WP No.-WPS-40.

Sahlman, W. A. (1990) The structure and governance of venture capital organizations. Journal of Financial Economics 27, 473-524.

Sahlman, W. A. & Stevenson, H. H. (1985) Capital market myopia. Journal of Business Venturing, 1, 7-30.

Sandberg,W. R., Schweiger, D. M. & Hofer, C. W. (1988) The uses of verbal protocols in determining venture capitalists' decision process. Entrepreneurship Theory Practice, winter: 8 – 20.

Sapienza, H.J., Manigart, S. & Vermeir, W. (1996) Venture capitalist governance and value added in four countries. Journal of Business Venturing, 11(6): 439 – 469.

Sapienza, H. J. (1992) When do venture capitalists add value? Journal of Business Venturing, 7(1): 9 – 27.

Sapienza, H. J. & Timmons, A. (1989) Launching and building entrepreneurial companies. Frontiers of Entrepreneurship Research 1989, Wellesley, MA: Babson College: 245-257.

Satish, T. (2002) Venture capital in India. New Delhi: Galgotia Publishing Company.

Saunder ,M., Lewis,P. & Thornhill , A.(2006) Research methods for business students. India: Pearson.

Shaw, E.S. (1973) Financial deepening in economic development. NY: Oxford University Press.

Shepherd, D., Zacharakis, A. & Baron, R. (2003) VCs' decision processes: evidence suggesting more experience may not always be better. Journal of Business Venturing, 18 (3): 381 – 402.

Shepherd, D. A. (1999) Venture capitalists introspection: A comparison of 'in use' and 'espoused' decision policies. Journal of Small Business Management, April 76 – 87.

Shepherd, D.A. & Zacharakis, A.L. (1999) Conjoint analysis: a new methodological approach for researching the decision policies of venture capitalists. Venture Capital, 99, (1): 197 – 217.

Silva, J. (2004) Venture capitalists' decision-making in small equity markets: A case study using participant observation. Venture Capital, 6(2/3): 125-145.

Silver, A. D. (1985) Venture capital: The complete guide for investors. NY: Wiley.

SME financing in India: An Indian Perspective, RBI. Date of Publish: Oct 13, 2003.

Smith R. L. & Smith, J. K. (2000): Entrepreneurial Finance. NY: Wiley.

Sorensen, M. (2006) How smart is smart Money? A two-sided matching model of venture capital. Working Paper,University of Chicago.

Spector, P.E, (1992) Summated rating scale construction: An introduction. NY: Sage Publication.

Spence, A.M. (1974) Market signaling: Informational transfer in hiring related screening processes. Cambridge, MA: Harvard University Press.

Tian, X. (2006) Keep a tight leash: What does venture capital stage financing tell the market? Working Paper, Boston College.

Tyebjee, T. T. & Bruno, A. V. (1984) Models of venture capital investment activity. Management Science, 30: 1051 – 1066.

Tyebjee, T. T. & Bruno, A. V. (1981) Venture capital decision-making. In K.H. Vesper (ed.) Frontiers of Entrepreneurship Research, Wellesley, MA: Babson College: 281 –320.

Vladimir A., Vladimir I. & Litvak, K. (2007) The impact of litigation on venture capitalist reputation. NBER WP-13641.

Venkatramam, N. & Grant J. H. (1996) Construct measurement in organizational strategy research; a critique proposal. Academy of mangement review 11(1): 71-78.

Verma J. C. (1997) Venture capital financing in India. New Delhi: Response.

Vesper, K., (1980) New venture strategies. USA: Prentice Hall.

Wells, W. A. (1974) Venture capital decision-making. Unpublished doctoral dissertation, Carnegie Mellon University, Pittsburgh.

Wetzel, W.E. (1981) Informal risk capital in New England, in K.H. Vesper (ed.) Frontiers of Entrepreneurship Research 1981, Babson College, Wellesley, MA, pp. 217-245.

Wilson R. (1968) The theory of syndicates. Econometrica 36(1): 119 – 132.

Wongsunwai, Wan. (2007) Does venture capitalist quality affect corporate governance? Unpublished doctoral dissertation, Harvard Business School.

World Bank, (1989) India Industrial Technology Development Project Staff Appraisal Report. World Bank Washington, DC.

ANNEXURES

Annexure 1 Covering letter and questionnaire for venture capitalist

Annexure 1I Questionnaire for entrepreneurs

Annexure 1II Details of IVCA and IIA

Dear Sir

I am undertaking a new research project with the goal of evaluating the problems faced by entrepreneurs in obtaining finance and how venture capitalist select potential investors to fund and help commercialize innovative technologies in the state of **Uttar Pradesh.**

This survey consists of two questionnaires one for the entrepreneur and the second one for venture capitalist. Enclosed is a questionnaire for survey that we are administering to the venture capitalist that have processed/evaluated/funded investment proposals from Uttar Pradesh. We assume that you being a senior executive of the company are familiar with the venture evaluation criteria of your company.

We will be happy to share the completed analysis with you. Participation in this study is entirely voluntary and you may decline to answer any questions. The information you provide will be kept **strictly confidential**, and findings will be reported in the aggregate and without attribution. Please return the enclosed questionnaire to and queries if any to the email /mail address given below.

Thank you for your participation!

Regards

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Questionnaire for Venture Capitalist

Survey on Problems and Prospects of Venture Capital in Uttar Pradesh

Thank you for taking the estimated 8-10 minutes to complete this Questionnaire. We promise strict confidentiality concerning your responses. Please answer each question to the best of your ability. If a specific point is particularly proprietary, please feel free to skip that point.

Name and Designation: _____

Age of Company in years: **0-5** ☐ **6-10** ☐ **11-15** ☐ **Above 15** ☐

Funding Range (Rs.): _____

Q1. There are certain issues, which are considered while deciding on venture capital investments, some of which are given below. Kindly rate their importance (1-Not Important, 2-Slightly Important, 3-Important, 4-Quite Important, 5-Very Important).

Ch aracteristics of Entrepreneurs					
Leadership qualities	1	2	3	4	5
Integrity and commitment	1	2	3	4	5
Long term vision	1	2	3	4	5
Commercial orientation	1	2	3	4	5
Technical expertise	1	2	3	4	5
Financial expertise	1	2	3	4	5
Knowledge of market	1	2	3	4	5
Ability to handle a team	1	2	3	4	5
Characteristics of the Product/Services					
Uniqueness (Different from existing products)	1	2	3	4	5
Existence of Prototype	1	2	3	4	5
Existence of patent	1	2	3	4	5

Superior (Better than existing products)	1	2	3	4	5
Characteristics of the Target Market					
Large Size	1	2	3	4	5
High growth rate	1	2	3	4	5
Low competition	1	2	3	4	5
Features of Deal					
Percentage share of equity (ownership) offered to Venture capitalist	1	2	3	4	5
Price of equity being offered to Venture capitalist	1	2	3	4	5
Risk	1	2	3	4	5
Returns	1	2	3	4	5
Whether other venture capitalist are willing to participate	1	2	3	4	5
Provision in Contracts to mitigate conflict with the entrepreneurs	1	2	3	4	5
Option of exit (ease of liquidation when needed)	1	2	3	4	5
Features of the Region					
Close to the office of Venture capitalist	1	2	3	4	5
Clarity in the rules and regulations	1	2	3	4	5
Stability in policies	1	2	3	4	5
Infrastructure facilities to support the project	1	2	3	4	5
Availability of trained manpower	1	2	3	4	5
Conducive law and order to prevent and resolve disputes	1	2	3	4	5

Q2. How would you rate the presence of the following features in investment proposals from Uttar Pradesh on a scale of 1-5? (1-Not at all present, 2-Slighltly present, 3-Present, 4-Very much present, 5-Always present)

Characteristics of Entrepreneurs					
Leadership qualities	1	2	3	4	5
Integrity and commitment	1	2	3	4	5
Long term vision	1	2	3	4	5
Commercial orientation	1	2	3	4	5
Technical expertise	1	2	3	4	5
Financial expertise	1	2	3	4	5
Knowledge of market	1	2	3	4	5
Ability to handle a team	1	2	3	4	5
Characteristics of the Product/Services					
Uniqueness (Different from existing products)	1	2	3	4	5
Existence of prototype	1	2	3	4	5
Existence of patent	1	2	3	4	5
Superior (Better than existing product)	1	2	3	4	5
Characteristics of the Target Market					
Large Size	1	2	3	4	5
High growth rate	1	2	3	4	5
Low competition	1	2	3	4	5
Features of Deal					
High percentage share of equity (ownership) is offered to Venture capitalist	1	2	3	4	5
Low price of equity is offered to Venture capitalist	1	2	3	4	5
Low risk	1	2	3	4	5
High returns	1	2	3	4	5
Acceptance of other Venture Capitalist to participate	1	2	3	4	5
Provision in contracts to mitigate conflict with the entrepreneurs	1	2	3	4	5
Option of exit (Ease of liquidation when needed)	1	2	3	4	5

Features of the Region

Close to office of Venture capitalist	1	2	3	4	5
Clarity in the rules and regulations	1	2	3	4	5
Stability in policies	1	2	3	4	5
Infrastructure facilities to support the project	1	2	3	4	5
Availability of trained manpower	1	2	3	4	5
Conducive law and order to prevent and resolve disputes	1	2	3	4	5

Q3. Can venture capital help in the economic development of Uttar Pradesh?

- ☐ No
- ☐ Yes, if so how (1-Strongly Disagree, 5-Strongly Agree). Venture capital can assist by,

Spurring innovation	1	2	3	4	5
Boosting entrepreneurship	1	2	3	4	5
Identifying areas where Uttar Pradesh has a competitive advantage	1	2	3	4	5
Generating employment	1	2	3	4	5
Attracting investments from other sources	1	2	3	4	5
Improving the brand image of Uttar Pradesh	1	2	3	4	5
Advising government to formulate policies spurring industrialization	1	2	3	4	5
Creating a trust amongst entrepreneurs from other states and foreign countries to invest in Uttar Pradesh	1	2	3	4	5

Q4. Can venture capital assist in making industrial unit in Uttar Pradesh more competitive?

- ☐ No
- ☐ Yes, if so how (1-Strongly Disagree, 5-Strongly Agree). Venture capital

can assist by,

Better evaluation of projects	1	2	3	4	5
Providing Strategic advice	1	2	3	4	5
Providing managerial advice	1	2	3	4	5
Expanding marketing networks	1	2	3	4	5
Better management of financial resources	1	2	3	4	5
Instill better governances	1	2	3	4	5
By helping in Manpower recruitment and training	1	2	3	4	5

Q5. Can the government of Uttar Pradesh promote Venture Capital Funding in the state?

☐ No

☐ Yes, if so how (1-Not Important, 5-Very Important). Government can promote venture capital by,

Providing better infrastructure	1	2	3	4	5
Establishing incubators	1	2	3	4	5
Improving manpower issues	1	2	3	4	5
Faster clearance of investment proposals	1	2	3	4	5
Simplifying regulatory and legal issues	1	2	3	4	5
Providing tax concessions	1	2	3	4	5
Establishing state dedicated venture capital funds	1	2	3	4	5
Establishing special cell to oversee venture capital investment in Uttar Pradesh	1	2	3	4	5
Clarifying the policies and procedures	1	2	3	4	5
Ensuring stability in policies and procedures	1	2	3	4	5

Q6. a) Is syndicate structure (An association of venture capitalist jointly contributing capital for a specific venture) a better option to invest venture capital funds in Uttar Pradesh?

☐ No

☐ Yes (proceed to part b)

b) What is the importance of syndication, kindly rate the following factors as given below (1-Not Important, 2-Slightly Important, 3-Important, 4-Quite Important, 5-Very Important). Syndication can help by,

Better evaluation of investment proposal	1	2	3	4	5
Sharing of risk	1	2	3	4	5
Sharing of profit/loss	1	2	3	4	5
Better management of venture	1	2	3	4	5
Providing signal that the venture is good	1	2	3	4	5

Q7. a) What are the various areas of interest for a venture capitalist in Uttar Pradesh?

	Y	N
Software	☐	☐
Hardware	☐	☐
Telecommunication	☐	☐
Biotechnology	☐	☐
Media/Entertainment	☐	☐
Real Estate	☐	☐
Any other (Please Specify)	_____	

b) Out of the above areas, which is your most preferred area for venture capital financing in the state of Uttar Pradesh? _____

Q8. There are various types/stages of venture capitalist financing. Which of these would you consider for Uttar Pradesh?

	Y	N
Seed financing	☐	☐
Start up financing	☐	☐
Early stage/growth financing	☐	☐
Development/expansion financing	☐	☐
Mezzanine financing	☐	☐
Management Buy in/ Buy out	☐	☐

THANK YOU

If you would like a copy of the survey results or if you want to discuss the survey, please call or mail to Ahmar Uddin (**09415066672 or ahmaruddin@sify.com**)

Q2. Have you ever faced a problem in raising capital for a new business? /क्या आपको कभी नये व्यापार के लिये पूँजी एकत्र करने में कोई समस्या आई

☐ No / नहीं

☐ Yes (proceed to part a and b) / हाँ (a & b) का अनुपालन करें)

a) Rate the problems you have faced in raising equity capital (Self and Individuals sources), /समता पूँजी (निजी और व्यक्तिगत स्रोत) को एकत्र करने में आपकी समस्या की दर क्या है।(1-No Problem/कोई समस्या नहीं,, 5- Great Problem /बड़ी समस्या)

Funds are insufficient to meet the requirements आवश्यकतानुसार धन की अनुपलब्धता	1	2	3	4	5
Difficult to convince as there is a lack of trust / विश्वास की कमी–सहमति में कठिनाई	1	2	3	4	5
Cost of fund is high /उच्च लागत	1	2	3	4	5
Process is time consuming /दीर्घकालीन प्रक्रिया	1	2	3	4	5
Collateral/Guarantee is required /गारंटी चाहिये	1	2	3	4	5
Excessive paper work /कागजी कार्य अधिक	1	2	3	4	5
References/Assurances are required /सन्दर्भ चाहिये	1	2	3	4	5
Chances of obtaining finance are low धन प्राप्त की सम्भावना कम	1	2	3	4	5

b) Rate the problems you have faced in raising debt capital (Banks and Financial institutions) /ऋण पूँजी (बैंक और वित्तीय संस्थान) एकत्र करने में समस्या की दर क्या है, (1-No Problem ध्कोई समस्या नहीं, 5- Great Problemध बडी समस्या)

Funds are insufficient to meet the requirements /आवश्यकतानुसार धन की अनुपलब्धता	1	2	3	4	5
Difficult to convince as there is a lack of trust /विश्वास की कमी–सहमति में कठिनाई	1	2	3	4	5
Cost of fund is high / उच्च लागत	1	2	3	4	5
Process is time consuming /दीर्घकालीन प्रक्रिया	1	2	3	4	5

Collateral/Guarantee is required /गारंटी चाहिये	1	2	3	4	5
Excessive paper work /कागजी कार्य अधिक	1	2	3	4	5
References/Assurances are required /सन्दर्भ चाहिये	1	2	3	4	5
Chances of obtaining finance is low /धन प्राप्त की सम्भावना कम	1	2	3	4	5

Q3. Do you have a new innovation/technology/R&D, which requires funds? /क्या आपके पास अभिनव/तकनीक/शौक एवं विकास है, जिस के लिये धन चाहिये

- ☐ No /नहीं
- ☐ Yes / (proceed to part b and c) / हाँ (a और b) का क़ा अनुपालन करें)

a) How much funds would you require? आपको कितने धन की आवश्यकता है

- ☐ Up to Rs 25 lakhs / 25 लाख तक
- ☐ Rs 25 lakhs to Rs 5 crores / 25 लाख से 5 करोड़ तक
- ☐ Rs 5 crores to Rs 10 crores / 5 करोड़ से 10 करोड़ तक
- ☐ Above Rs 10 crores / 10 करोड से ऊपर

b) Do you feel it would be easy to raise capital? / क्या आपको लगता है कि धन आसानी से उपलब्ध हो जायेगा।

- ☐ No / नहीं
- ☐ Yes / हाँ

Q4. Venture Capital can fund risky and new ideas without any guarantee. Have you heard of venture capital / वेन्चर पूँजी जोखिम पूर्ण और नये विचार के लिये बिना गारंटी धन उपलब्ध कराता है। क्या आपने उसके बारे में सुना ?

- ☐ No / नहीं
- ☐ Yes (proceed to part a) / हाँ (a का अनुपालन करें)

a) Have you approached or availed Venture Capital funds for financing your business requirements / क्या आपने व्यवसाय के लिये प्रयास किया वेचर कैपिटल प्राप्त करने के लिये?

- ☐ No / नहीं
- ☐ Yes (proceed to part b) /हाँ (b का अनुपालन करें)

b) What problems did you face/perceive with Venture Capital Funds / वेन्चर कैपिटल फंड में आपको क्या समस्या आई/लगती हैं?(1-Strongly Disagree / दृढतापूर्ण असहमति, 5-Strongly Agree / दृढतापूर्ण सहमति)

Venture capitalist are unapproachable/ वेन्चर कैपिटल पहुँच से दूर है।	1	2	3	4	5
Venture capital is a costly source of raising capital/ वेन्चर कैपिटल धन उपलब्धता के लिये महंगा स्रोत है।	1	2	3	4	5
Lack of control on business decision as VC interfere in business decisions / व्यवसायिक निर्णय में नियन्त्रण का आभाव	1	2	3	4	5
Venture capital finances only high technology firms/ केवल उच्च तकनीकी को वेन्चर कैपिटल धन उपलब्ध कराता है	1	2	3	4	5
Confidentiality is lost as business plans have to be to the disclosed venture capitalist / व्यवसाय की योजना को वेंचर कैपिटलिस्ट को बताना होता है जिससे विश्वासनीयता खो जाती है।	1	2	3	4	5
Funds requirement for new venture are too small for Venture Capital funding / नये वेंचर के लिये धन की आवश्यकता वेंचर कैपटिलिस्ट की सीमा कम होती है।	1	2	3	4	5
Negotiations with venture capitalist are time consuming / प्रक्रिया दीर्घकालीन है।	1	2	3	4	5
Chances of obtaining finance from Venture Capital is low धन प्राप्ति की प्राथमिकता कम।	1	2	3	4	5

Q5. Venture capitalist can provide assistance to the entrepreneur in various forms. The list given below shows the various methods by which a venture capital fund can provide help. Kindly rate their importance for your business. / वेंचर कैपिटल अनेक प्रकार से उद्यमी के लिये सहायक है निम्न को अंक प्रदान करें। / (1-Not important, बिल्कुल जरूरी नहीं 5-Very Important बहुत ज्यादा जरूरी)

Venture capital can provide funds for business / वेन्चर कैपिटल व्यापार के लिये धन उपलब्ध करता है	1	2	3	4	5
Association with a venture capital can improve the brand image of your company / वेन्चर कैपिटल से कम्पनी की ब्राण्ड इमेज बढ़ाई जा सकती है।	1	2	3	4	5
Venture capital provides help in strategic Planning /योजनागत रणनीति हेतु सहायक	1	2	3	4	5
Venture capital can provide help in marketing your products/services/मार्केटिंग में सहायक	1	2	3	4	5
Venture capital fund can provide technical assistance / तकनीकी सहायता की उपलब्धता।	1	2	3	4	5
Venture capital fund can help in raising funds from other sources / वेन्चर कैपिटल व्यापार के लिये दूसरे स्रोतों से भी धन उपलब्ध कराता है	1	2	3	4	5
Venture capital fund can provide operational help/ क्रियात्मक सहायता हेतु	1	2	3	4	5
Venture capital fund can assist in manpower recruitment and training / कार्य करने वाले लोगों की भर्ती और प्रशिक्षण में सहायता।	1	2	3	4	5
Venture capital provides assistance to improve corporate governance / सामाजिक जिम्मेदारी के निर्वहन में सहायक	1	2	3	4	5

THANK YOU

If you would like a copy of the results or if you want to discuss the survey, please call or mail to/सर्वेक्षण की कापी चाहिये तो सम्पर्क करें (**ahmaruddin@** sify.com **or 9415066672)**

Indian Venture Capital and Private Equity Association (IVCA)

IVCA is a member based national organization that represents venture capital and private equity firms, promotes the industry within India and throughout the world and encourages investment in high growth companies.

The Indian Venture Capital Association was established in 1993 and is based in Delhi, the capital of India. IVCA's mission is to promote the development of venture capital and private equity industry in India and to support entrepreneurial activity and innovation. The IVCA also serves as a powerful platform for investment funds to interact with each other.

IVCA members comprise venture capital firms, institutional investors, banks, incubators, angel groups, corporate advisors, accountants, lawyers, government bodies, academic institutions and other service providers to the venture capital and private equity industry.

Members represent most of the active venture capital and private equity firms in India. These firms provide capital for seed ventures, early stage companies, later stage expansion, and growth finance for management buyouts/buy-ins of established companies.

Indian Industries Association (IIA)

IIA is an association of Micro, Small & Medium Scale industries having members primarily from the state of Uttar Pradesh. Through its efforts IIA has been able enroll entrepreneurs from all the districts of Uttar Pradesh.

For more than two decades IIA has worked consistently for creating an environment conducive to industrial growth in Uttar Pradesh, disseminating valuable information on legal & technical aspects, latest development in industry and market, about latest Government policies, procedure and laws etc. apart from solving the teething problems of the Industry. IIA also organizes trade fairs, surveys and development programs for entrepreneurs at State level/ National level for promotion of Micro, Small and Medium Industries.